ORDER NO. EMID941511
A4

Service Manual

PCM Digital Ensemble
SX-PR307/307K

(M), (MC), (XM), (EN), (EH), (EF), (EZ), (EW), (EA), (EP), (EK), (XL), (XR), (XS), (XD), (X), (XT)

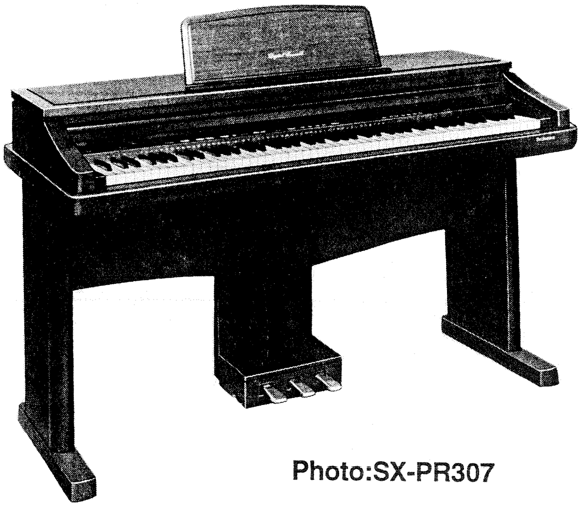

Photo:SX-PR307

AREAS

(M):	U.S.A.	(EK):	the United Kingdom
(MC):	Canada	(XL):	New Zealand
(XM):	Mexico	(XR):	Australia
(EN):	Norway, Sweden, Denmark, Finland	(XS):	Malaysia, Singapore, South Africa
(EH):	Holland, Belgium	(XD):	Saudi Arabia, Kuwait
(EF):	France, Italy	(X):	the Middle East, Indonesia, Hong Kong, the Philippines, Thailand
(EZ):	Germany		
(EW):	Switzerland		
(EA):	Austria		
(EP):	Spain,Portugal,Greece	(XT):	Taiwan

■ Specifications

KEYBOARD		88 KEYS
SOUND GENERATOR		PCM
MAXIMUM NUMBER OF NOTES PRODUCED SIMULTANEOUSLY		32 NOTES
SOUNDS	PIANO(4 SOUNDS)	GRAND PIANO, UPRIGHT PIANO, ELECTRIC PIANO, MODERN PIANO
	SOUND SELECT (196 SOUNDS)	GROUP: PIANO/E.PIANO, GUITAR, STRINGS, VOCAL/ENSEMBLE, BRASS, FLUTE, BASS, KEYBOARD PERC, HARPSI/MALLET, SPECIAL PERC, ORGAN, REED, SAX/CLARINET, SYNTH LEAD, SYNTH PAD, PERC/EFFECT
PLAY STYLE		PIANO MODE, KEYBOARD SPLIT, AUTO PLAY CHORD
KEY SPLIT		○ (G2, C3, C4)
PEDAL		SUSTAIN, SOSTENUTO, SOFT
DIGITAL EFFECT		○
DIGITAL REVERB		○
TRANSPOSE		○(G-C-F#)
RHYTHM SELECT(100 RHYTHMS)		GROUP:8 BEAT, 16 BEAT, SWING, JAZZ COMBO, ROCK/DISCO, MODERN ROCK, ROCK(OTHERS), COUNTRY/R&B, MARCH/POLKA, LATIN 1, SHOW TIME, TRAD, WALTZ, LATIN 2
CONTROL		MAIN VOLUME, BALANCE, START/STOP, SYNCHRO START, FILL IN 1, FILL IN 2, VARIATION, INTRO & ENDING, TEMPO/PROGRAM
METRONOME		○
ONE TOUCH PLAY/ MUSIC STYLE SELECT		○
AUTO PLAY CHORD		BASIC, ADVANCED, PIANIST, ACCOMP PART 1, 2, 3
DYNAMIC ACCOMP		○
PANEL MEMORY		SET, 1-6
SEQUENCER		16 TRACKS STORAGE CAPACITY : APPROX 19000 NOTES INPUT MODES : REAL TIME, STEP (CHORD, RHYTHM ONLY) FUNCTIONS : TRACK ASSIGN, EDIT (TRACK CLEAR, SONG CLEAR, QUANTIZE, TRACK MERGE, MEASURE ERASE, MEASURE COPY), PUNCH RECORD, PLAY, MEDLEY
COMPOSER		STORAGE CAPACITY : APPROX 8600 NOTES, 5 PARTS (BASS ACCOMP 1, 2, 3, DRUMS),MEMORY : 2BANK ×6 FUNCTIONS : MODE SELECT, LOAD SINGLE COMPOSER
DISPLAY		LCD (240 × 64 DOTS), CONTRAST, EXIT, MORE/RETURN, DISPLAY HOLD
DEMO		○
HELP		○
DISK DRIVE		DISK LOAD, DISK SAVE, MIDI FILE LOAD, MIDI FILE SAVE, LOAD SINGLE COMPOSER, DISK FORMAT
SOUND		SOUND SETTING (SOUND SELECT, KEY SHIFT, PAN SETTING, PART REVERB, PITCH BEND RANGE), BALANCE, TECHNI-CHORD TYPE, REVERB SET, ADVANCED TYPE
TUNE & TOUCH		MASTER TUNING, PIANO TUNING, TOUCH SENSE, MINIMUM RANGE
MEMORY & CONTROL		INITIAL, PEDAL SETTING
MIDI		MIDI PRESETS, BASIC CHANNEL, OCTAVE SHIFT, GENERAL MIDI, LOCAL CONTROL, REALTIME MESSAGE, COMMON SETTING, INPUT/ OUTPUT, PROGRAM CHANGE TO PANEL MEMORY

Technics

EXTERNAL MEMORY	DISK DRIVE FOR 2HD, 2DD
TERMINALS	HEADPHONE TERMINALS × 2, LINE OUT, AUX IN, MIDI (IN, THRU, OUT), MIC
OUTPUT	60 W × 2
SPEAKERS	16cm × 2, 6.5cm × 2, MONITOR SPEAKER × 2
POWER REQUIREMENT	290 W , 195 W (NORTH AMERICA AND MEXICO)
	AC 120/220/240 V 50/60 Hz AC 120 V 60Hz (NORTH AMERICA AND MEXICO) AC 230 V 50/60 Hz (NEW ZEALAND AND EUROPE EXCEPT FOR UNITED KINGDOM) AC 230-240 V (UNITED KINGDOM)
DIMENSIONS (W × H × D)	143.3 cm × 104.6 cm × 59.1 cm (56-13/32" × 41-3/16" × 23-9/32")
NET WEIGHT	76 kg (167.6 lbs.)
ACCESSORIES	STAND, AC CORD

*Specification are subject to change without notice for further improvement.

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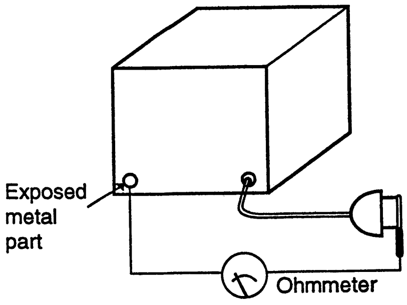
SAFETY PRECAUTION (This "safety precaution" is for the U.S.A. only)

● Safety Precaution

1. Before servicing, unplug the power cord to prevent an electric shock.
2. When replacing parts, use only the manufacturer's recommended components for safety.
3. Check the condition of the power cord. Replace if wear or damage is evident.
4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc. .
5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

● Insulation Resistance Test

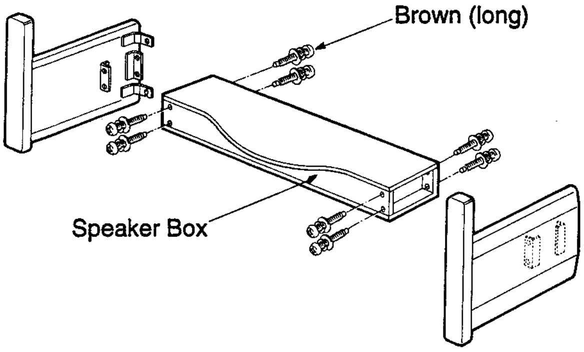
1. Unplug the power cord and short the prongs of the plug with a jumper wire.
2. Turn on the power switch.
3. Measure the resistance value with an ohmmeter between the jumpered AC plug and each exposed metal cabinet part, such as screw heads, connectors, control shafts, handle brackets, etc. . Measurements should range from 4 MΩ to infinity for all exposed parts.



Resistance = 4MΩ to ∞

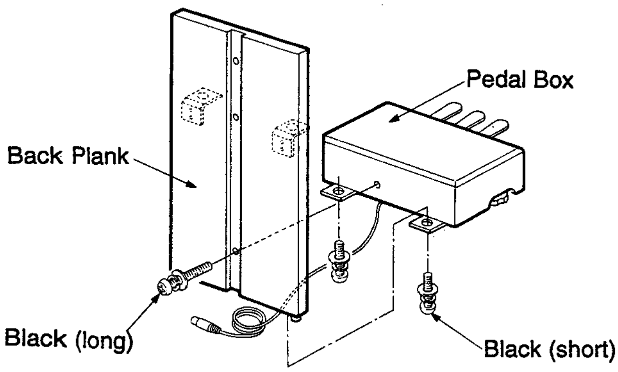
HOW TO ASSEMBLE THE PIANO

1 Assemble the side planks and the speaker box using the 8 long brown screws.


Brown (long)
Speaker Box

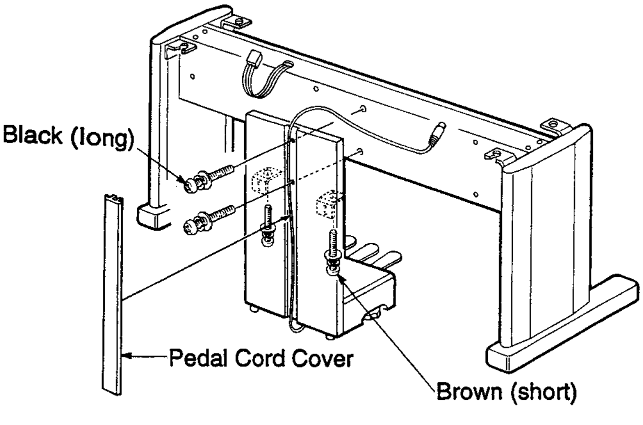
[Fig. 1]

2 Assemble the pedal box and the back plank using the 1 long black screw and 2 short black screws.


Pedal Box
Back Plank
Black (long)
Black (short)

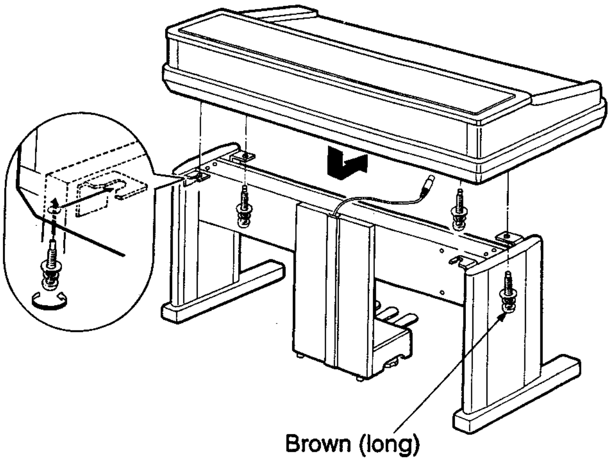
[Fig. 2]

3 Place the stand upright and attach the pedal unit to speaker box with 2 short brown screws and 2 long black screws, and then set the pedal cord cover in the groove.


Black (long)
Pedal Cord Cover
Brown (short)

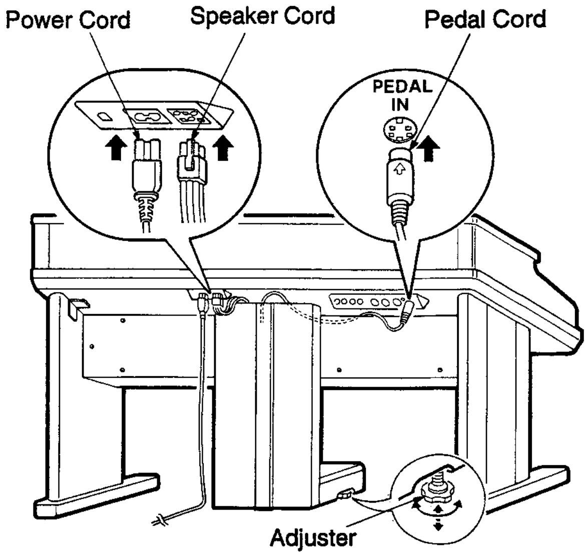
[Fig. 3]

4 Place the piano unit on the stand and secure it to the stand with 4 long brown screws.



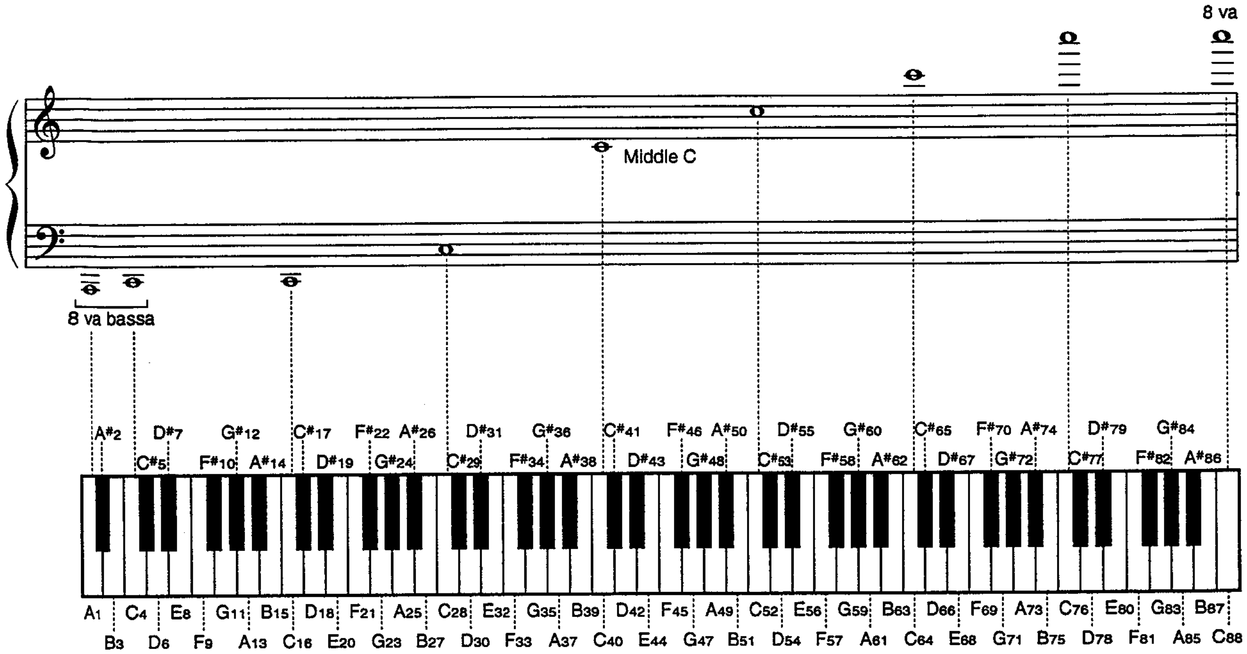
[Fig. 4]

5 Use the adjuster to make the pedal unit secure. Connect the pedal cord and speaker cord to their respective sockets located on the rear of the piano unit as shown below.

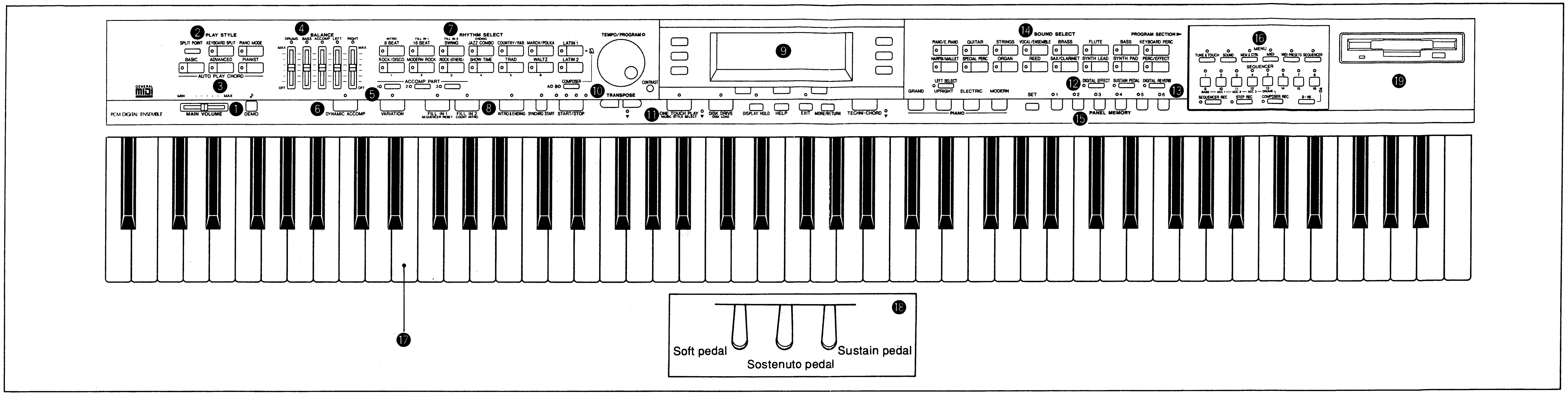

Power Cord
Speaker Cord
Pedal Cord
PEDAL IN
Adjuster

[Fig. 5]

KEYBOARD RANGES


8 va
Middle C
8 va bassa
A#2 D#7 G#12 C#17 F#22 A#26 D#31 G#36 C#41 F#46 A#50 D#55 G#60 C#65 F#70 A#74 D#79 G#84
C#5 F#10 A#14 D#19 G#24 C#29 F#34 A#38 D#43 G#48 C#53 F#58 A#62 D#67 G#72 C#77 F#82 A#86
A1 C4 E8 G11 B15 D18 F21 A25 C28 E32 G35 B39 D42 F45 A49 C52 E56 G59 B63 D66 F69 A73 C76 E80 G83 B87
B3 D6 F9 A13 C16 E20 G23 B27 D30 F33 A37 C40 E44 G47 B51 D54 F57 A61 C64 E68 G71 B75 D78 F81 A85 C88

ARRANGEMENT OF CONTROL PANEL


② PLAY STYLE
SPLIT POINT
KEYBOARD SPLIT
PIANO MODE
BASIC
ADVANCED
PIANIST
AUTO PLAY CHORD
③
GENERAL MIDI
MIN
MAX
① MAIN VOLUME
DEMO
PCM DIGITAL ENSEMBLE
④ BALANCE
DRUMS
BASS
ACCOMP
LEFT
RIGHT
MAX
OFF
⑦ RHYTHM SELECT
INTRO
8 BEAT
FILL IN 1
16 BEAT
FILL IN 2
SWING
ENDING
JAZZ COMBO
COUNTRY/R&B
MARCH/POLKA
LATIN 1
ROCK/DISCO
MODERN ROCK
ROCK (OTHERS)
SHOW TIME
TRAD
WALTZ
LATIN 2
1
2
3
4
5
6
ACCOMP PART
1
2
3
COMPOSER
A
B
⑤
⑥ DYNAMIC ACCOMP
VARIATION
FILL IN 1
SEQUENCER RESET
FILL IN 2
COUNT INTRO
⑧
INTRO & ENDING
SYNCHRO START
START/STOP
TEMPO/PROGRAM
CONTRAST
⑩ TRANSPOSE
⑨
⑪ ONE TOUCH PLAY
MUSIC STYLE SELECT
DISK DRIVE
DISK LOAD
DISPLAY HOLD
HELP
EXIT
MORE/RETURN
TECHNI-CHORD
⑭ SOUND SELECT
PIANO/E.PIANO
GUITAR
STRINGS
VOCAL/ENSEMBLE
BRASS
FLUTE
BASS
KEYBOARD PERC
HARPSI/MALLET
SPECIAL PERC
ORGAN
REED
SAX/CLARINET
SYNTH LEAD
SYNTH PAD
PERC/EFFECT
PROGRAM SECTION
LEFT SELECT
GRAND
UPRIGHT
ELECTRIC
MODERN
PIANO
⑫ DIGITAL EFFECT
SUSTAIN PEDAL
DIGITAL REVERB ⑬
SET
1
2
3
4
5
6
⑮ PANEL MEMORY
⑯ MENU
TUNE & TOUCH
SOUND
MEM & CTRL
MIDI
MIDI PRESETS
SEQUENCER
SEQUENCER
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
BASS
ACC 1
ACC 2
ACC 3
DRUMS
SEQUENCER REC
STEP REC
COMPOSER REC
9-16
⑲
⑰
⑱
Soft pedal
Sostenuto pedal
Sustain pedal

BASIC FUNCTIONS

① DEMO
Listen to programmed demonstration tunes which impart the charm of individual sounds and rhythm patterns.

② PLAY STYLE
When playing as a piano, select either a conventional keyboard or a split keyboard. The location of the split point can be set at G2, C3 or G3 with the **SPLIT POINT** button.

③ AUTO PLAY CHORD
When you play a chord on the keyboard, an accompaniment pattern which matches the selected rhythm is automatically produced. Select from three modes, according to your level of expertise.

④ BALANCE
The volumes for the **DRUMS, BASS, ACCOMP, LEFT** and **RIGHT** parts are adjusted with their respective **BALANCE** controls.

⑤ ACCOMP PART
The **AUTO PLAY CHORD** automatic accompaniment is comprised of three **ACCOMP** parts—**1, 2** and **3**—which you can turn on and off individually.

⑥ DYNAMIC ACCOMP
The patterns in the automatic accompaniment change automatically conforming to the condition of the performance.

⑦ RHYTHM SELECT
Various automatic rhythm patterns are stored in the permanent memory.

⑧ Rhythm control
The **FILL IN 1, 2** button are used to insert a fill-in pattern during the rhythm performance. Use the **INTRO & ENDING** button to start a song with an intro pattern or finish with an ending pattern. **START/STOP** is used to start and stop the rhythm instantly. Or turn on the **SYNCHRO START** button to start the rhythm by pressing a key on the left side of the keyboard. Regulate the speed of the automatic rhythm with the **TEMPO/PROGRAM** dial.

⑨ DISPLAY
During the normal performance mode, the selected rhythm, selected sound and tempo etc. displayed. When setting the functions for the **SEQUENCER, COMPOSER,** MIDI and others, the relevant information is displayed.

⑩ TRANSPOSE
C is the standard setting, but you can raise or lower the key of the entire keyboard in semi-tone steps across an entire octave.

⑪ ONE TOUCH PLAY/MUSIC STYLE SELECT
This special feature allows you to easily set all the panel settings, including sounds and effects, in just seconds.

⑫ Effects
DIGITAL EFFECT gives the sound greater depth and breadth. **SUSTAIN PEDAL** enables or disables operation of the sustain pedal.

⑬ DIGITAL REVERB
Turn the **DIGITAL REVERB** button on to add reverberation to the sound.

⑭ SOUND SELECT
You can select from 4 different piano sounds. And various sounds are available for each button.

⑮ PANEL MEMORY
Set the desired sounds, effects, split point , volume settings, rhythm, tempo, etc. with the panel controls. Then store the panel settings in one of the programmable memories. Then while you play, the touch of one button recalls the panel settings instantly.

⑯ PROGRAM SECTION
Open the sliding cover to use the multi-purpose **PROGRAM SECTION.** These buttons are used when setting the functions for the **SEQUENCER, COMPOSER** or MIDI, and others.

⑰ Keyboard
This keyboard features Touch Response, by which you control the volume by playing the keys harder or softer.

⑱ Pedals
The sustain pedal and sostenuto pedal apply sustain effects, and the soft pedal works as a damper.

⑲ Disk Drive
The Disk Drive allows you to store up to 20 performances on a memory disk.

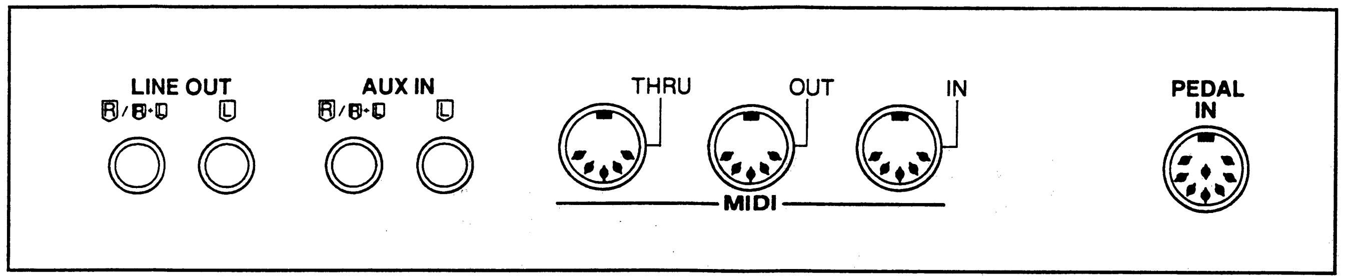
Initialization

The following procedure resets all programmable settings, functions and memories to their initialized (factory-preset) status. Use this procedure if the buttons, key, etc. malufunction, or when you wish to reset the memories and functions.

<Procedure>
1. Turn off the **POWER** button.
2. While pressing the three lower leftmost buttons in the **RHYTHM SELECT** section at the same time, turn the **POWER** button on again.

TERMINALS

(on the rear panel)


LINE OUT
R/R+L
L
AUX IN
R/R+L
L
THRU
OUT
IN
MIDI
PEDAL IN

LINE OUT (output level 1.0 Vrms, 600 Ω)
By plugging into a high-power amplifier, the sound can be reproduced at a high volume. (Use the **R/R+L** terminal when outputting monaural sound.)

AUX IN (input level 500 mVrms, 6 kΩ)
Other instruments such as a rhythm machine or sound module can be connected to the piano so that the sound is output from the piano. To receive monaural sound, connect instruments to the **R/R+L** terminal.

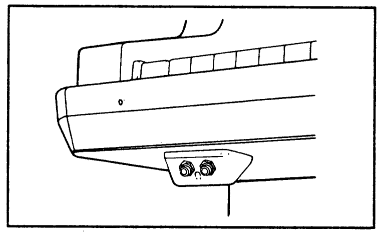
MIDI (Musical Instrument Digital Interface)
MIDI is the standard specification that enables connection to equipment such as synthesizers and personal computers.

IN : The terminal that receives data from external equipment.
OUT : The terminal that transmits data from this instrument to external equipment.
THRU: The terminal that transfers data from the **IN** terminal directly to other equipment.

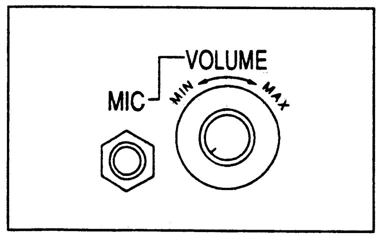
- Use a 5-pin DIN cord (less than 15 m long) for these connections.

PEDAL IN
Connect the included pedal.

PHONES (🎧) ×2
For silent practice, headphones may be used. When plugged in, the speaker system is automatically switched off, and sound is heard only through the headphones.

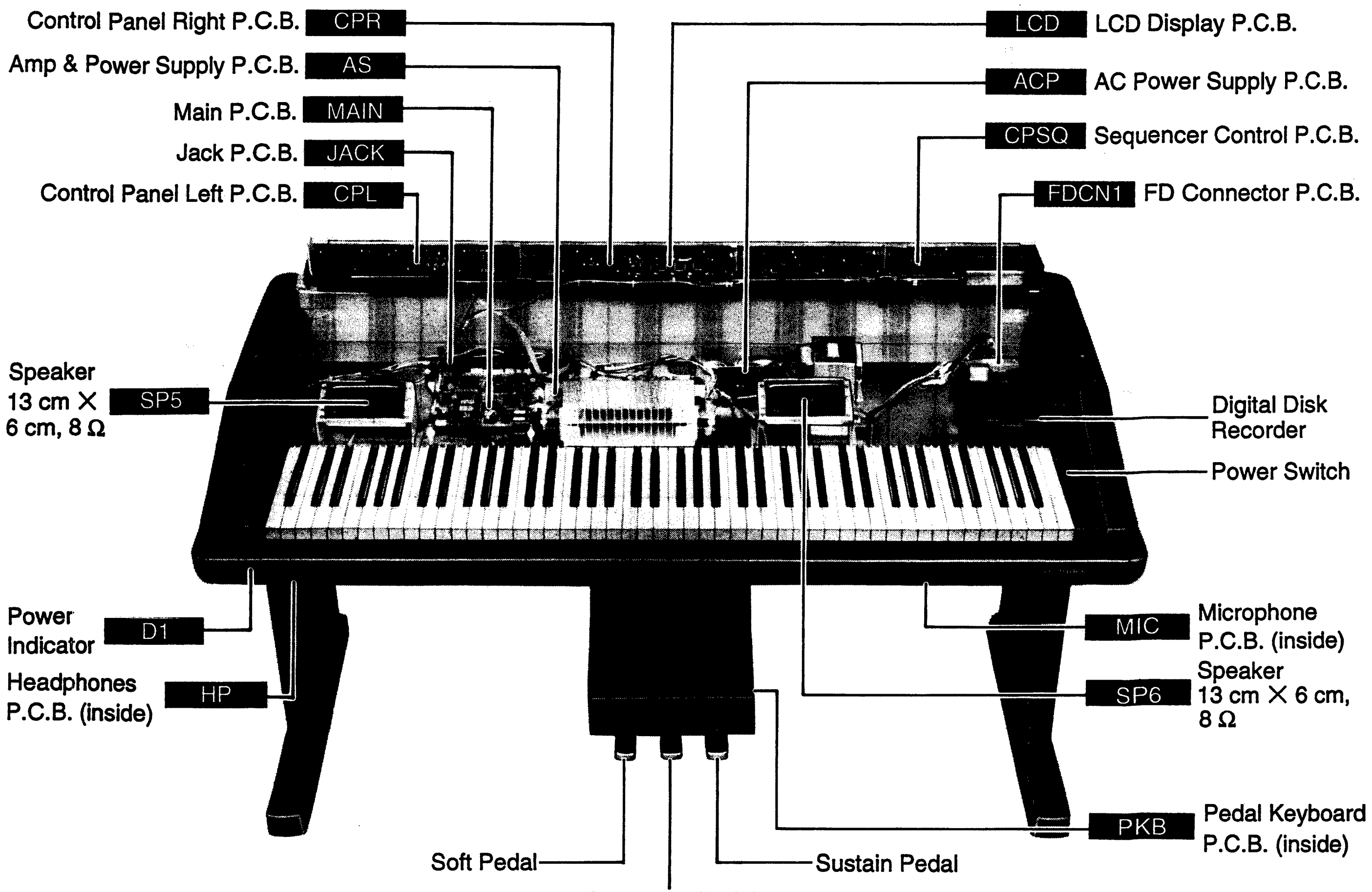


MIC (input level 7.5 mV, 10 kΩ)
The piano will accept a microphone of the undirectional type. This type of microphone reduces feedback to a minimum. **VOLUME** balances instrumental or vocal sounds fed into the microphone with the loudness of the piano.

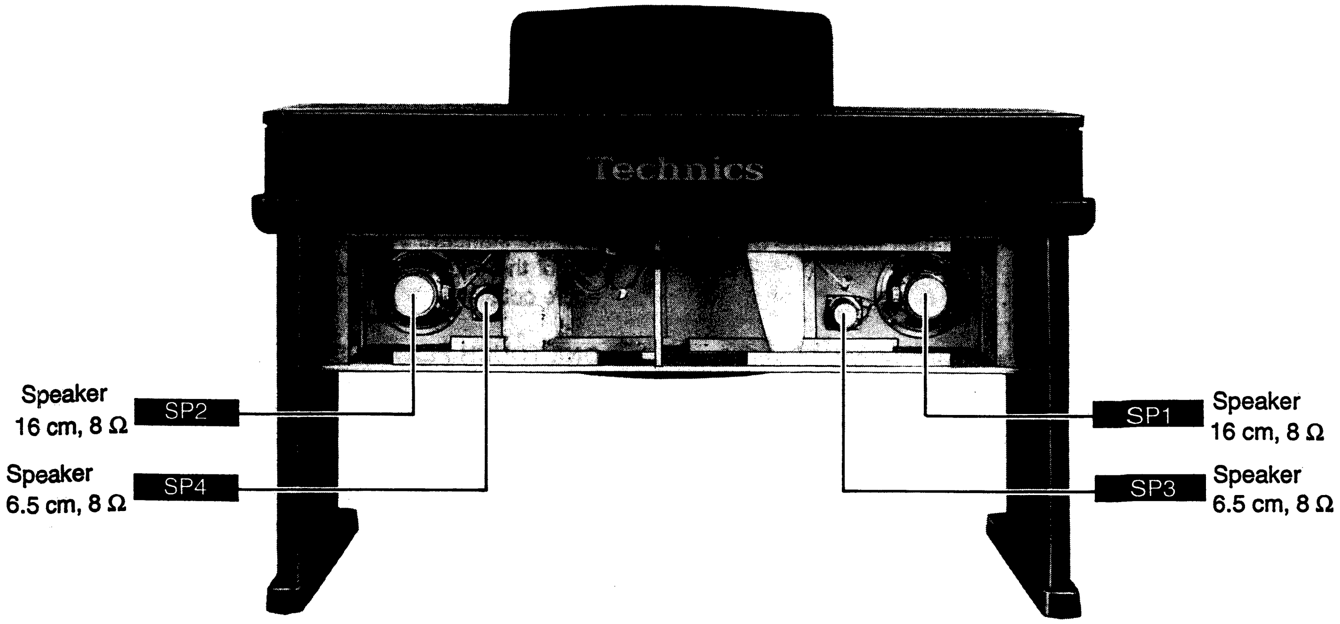

VOLUME
MIC
MIN
MAX

(Below the keyboard)

PARTS LOCATION


Control Panel Right P.C.B. CPR
Amp & Power Supply P.C.B. AS
Main P.C.B. MAIN
Jack P.C.B. JACK
Control Panel Left P.C.B. CPL
LCD LCD Display P.C.B.
ACP AC Power Supply P.C.B.
CPSQ Sequencer Control P.C.B.
FDCN1 FD Connector P.C.B.
Speaker 13 cm × 6 cm, 8 Ω SP5
Digital Disk Recorder
Power Switch
Power Indicator D1
Headphones P.C.B. (inside) HP
MIC Microphone P.C.B. (inside)
SP6 Speaker 13 cm × 6 cm, 8 Ω
PKB Pedal Keyboard P.C.B. (inside)
Soft Pedal
Sustain Pedal
Sostenuto Pedal

[Photo-1]


Technics
Speaker 16 cm, 8 Ω SP2
Speaker 6.5 cm, 8 Ω SP4
SP1 Speaker 16 cm, 8 Ω
SP3 Speaker 6.5 cm, 8 Ω

[Photo-2]

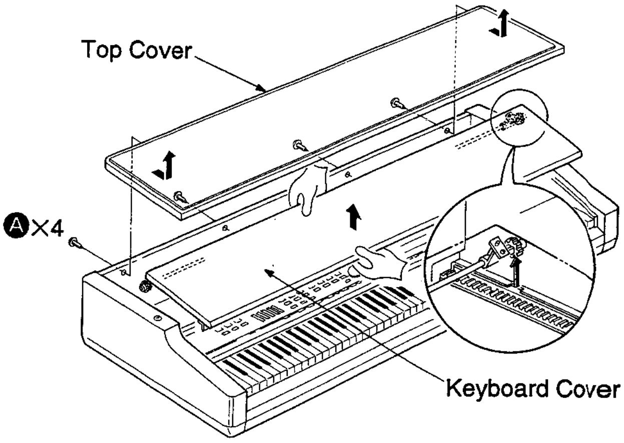
DISASSEMBLY INSTRUCTIONS

1 Removing the top cover

1. Remove the top cover affixing screws (Ⓐ 4 pcs.).
2. Slide the top cover forward and lift up (as shown by the arrows).

2 Removing the keyboard cover

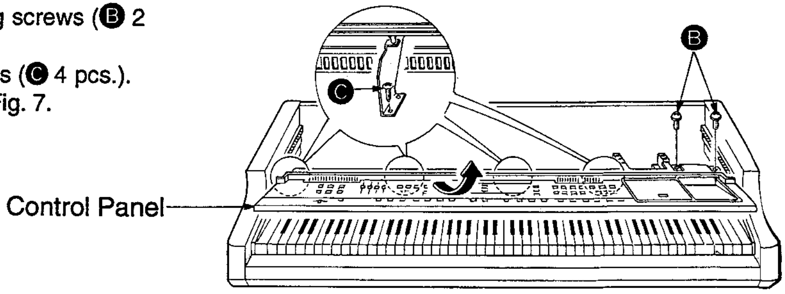
1. Remove the top cover (see Step 1).
2. Match the gears of the keyboard cover with the notches in the guide rail, and lift up the keyboard cover.



[Fig.6]

3 Removing the control panel

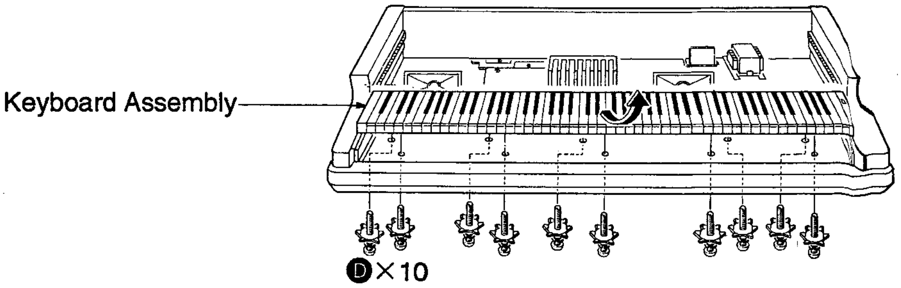
1. Remove the keyboard cover (see Step 2).
2. Remove the digital disk recorder affixing screws (Ⓑ 2 pcs.).
3. Remove the control panel affixing screws (Ⓒ 4 pcs.).
4. Remove the control panel as shown in Fig. 7.



[Fig.7]

4 Removing the keyboard assembly

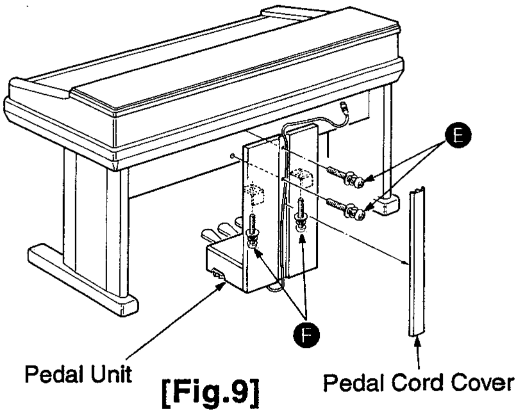
1. Remove the control panel (see Step 3).
2. Remove the keyboard assembly affixing screws located on the bottom of the cabinet (Ⓓ 10 pcs.).
3. Remove the keyboard assembly as shown in Fig. 8.



[Fig.8]

5 Removing the pedal unit

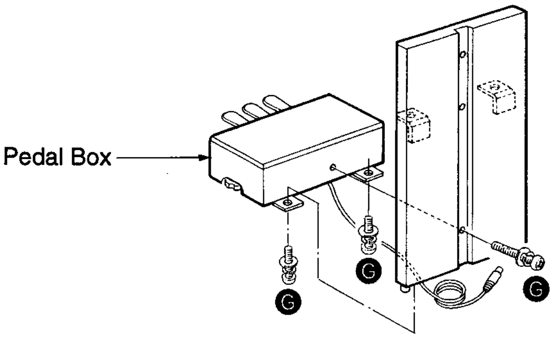
1. Remove the pedal cord cover.
2. Remove the pedal unit affixing screws (Ⓔ 2 pcs. and Ⓕ 2 pcs.).


Ⓔ
Ⓕ
Pedal Unit
Pedal Cord Cover

[Fig.9]

6 Removing the pedal box

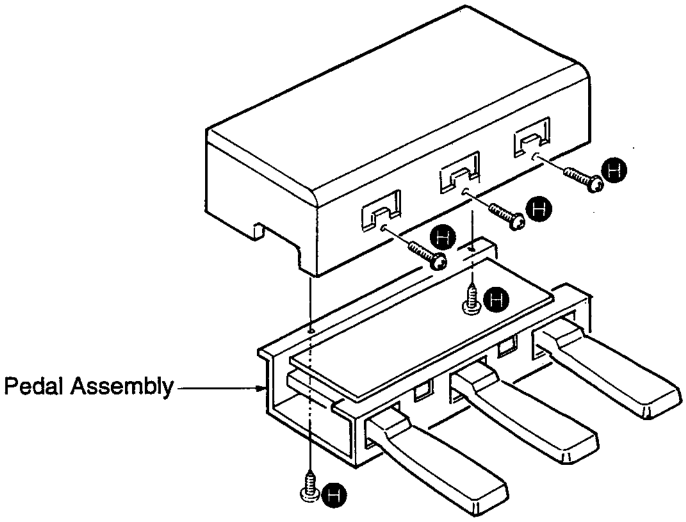
- Remove the pedal box affixing screws (Ⓖ 3 pcs.).



[Fig.10]

7 Removing the pedal assembly

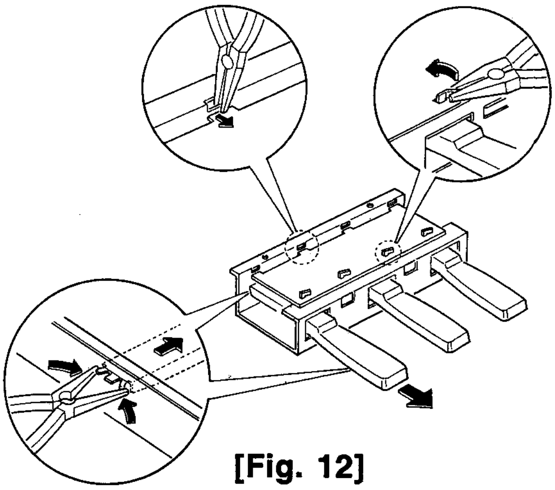
1. Remove the pedal box (see Step 6).
2. Remove the pedal assembly affixing screws (Ⓗ 5 pcs.).


Ⓗ
Ⓗ
Ⓗ
Ⓗ
Ⓗ
Pedal Assembly

[Fig.11]

8 Disassembly the pedal assembly

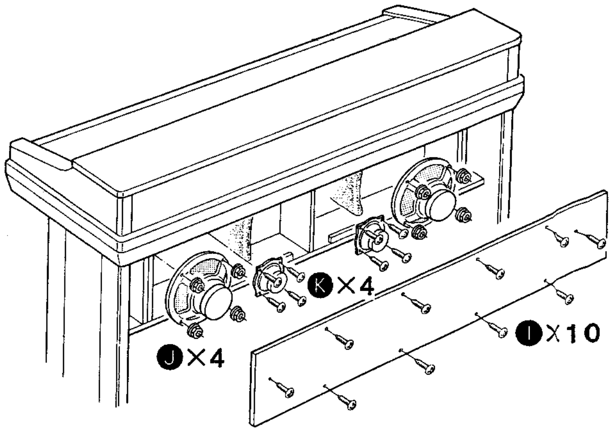
1. Remove the pedal assembly (see Step 7).
2. Disassemble the pedal assembly as shown in Fig. 12.



[Fig. 12]

9 Removing the speakers

1. Remove the pedal unit (see Step 5).
2. Remove the mounting screws for the rear board of the speaker box (Ⓘ 10 pcs.).
3. Remove the mounting nuts for the 16 cm speakers (Ⓙ 4 pcs. each).
4. Remove the mounting screws for the 6.5 cm speakers (Ⓚ 4 pcs. each).



[Fig. 13]

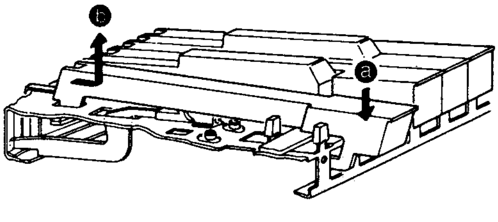
10 Keys (s)

Disassembly

1. Remove the keyboard assembly (see Step 4).
2. To release the key claw.
   ⓐ Press the front of the key downward slightly.
   ⓑ Press the rear of the key forward gently.
3. To remove the key, lift as shown in Fig. 14.

NOTE:

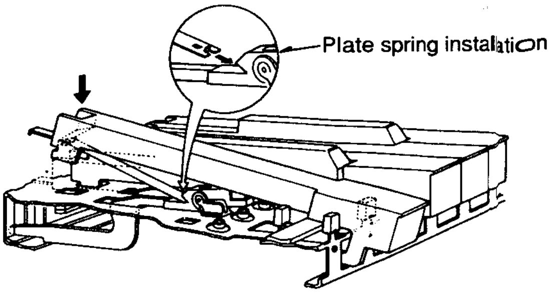
- The key claw is easily broken. Do not apply undue force. Should a key claw break, it can still be used; however, a replacement is recommended.
- If a black key is to be replaced it is necessary to remove both adjacent white keys.



[Fig. 14]

Assembly

1. Insert the front part of the key into the chassis.
2. Insert the plate spring into the hammer notch as shown in Fig. 15.
3. While slowly lowering the key into the chassis, insert the plate spring into the notch at the rear of the key.
4. Carefully insert the key into the opening in the chassis and slide the key towards the rear to lock it in place.



[Fig. 15]

11 Removing the printed circuit boards

- Remove the top cover (see Step 1).

MAIN P.C.B.

1. Remove the MAIN P.C.B. mounting screws (🅛 2 pcs.).
2. Release the claws of the 2 P.C.B. holders.

AS P.C.B.

1. Remove the AS P.C.B. mounting screws (🅜 2 pcs.).
2. Remove the claws of the P.C.B. holder.

JACK P.C.B.

1. Remove the MAIN and AS P.C.B..
2. Remove the JACK P.C.B. mounting screws (🅝 3 pcs.).
3. Remove the ground wire holding screws (🅞 2 pcs.).

HP P.C.B.

1. Remove the keyboard assembly (See Step 4).
2. Remove the headphone jack mounting nuts 🅟 2 pcs.).
3. Remove the HP P.C.B. mounting screw (🅠 1 pc.).
4. Remove the ground wire holding screw (🅡 1 pc.).

ACP P.C.B.

- Release the claws of the AC IN connector bracket.

LCD P.C.B.

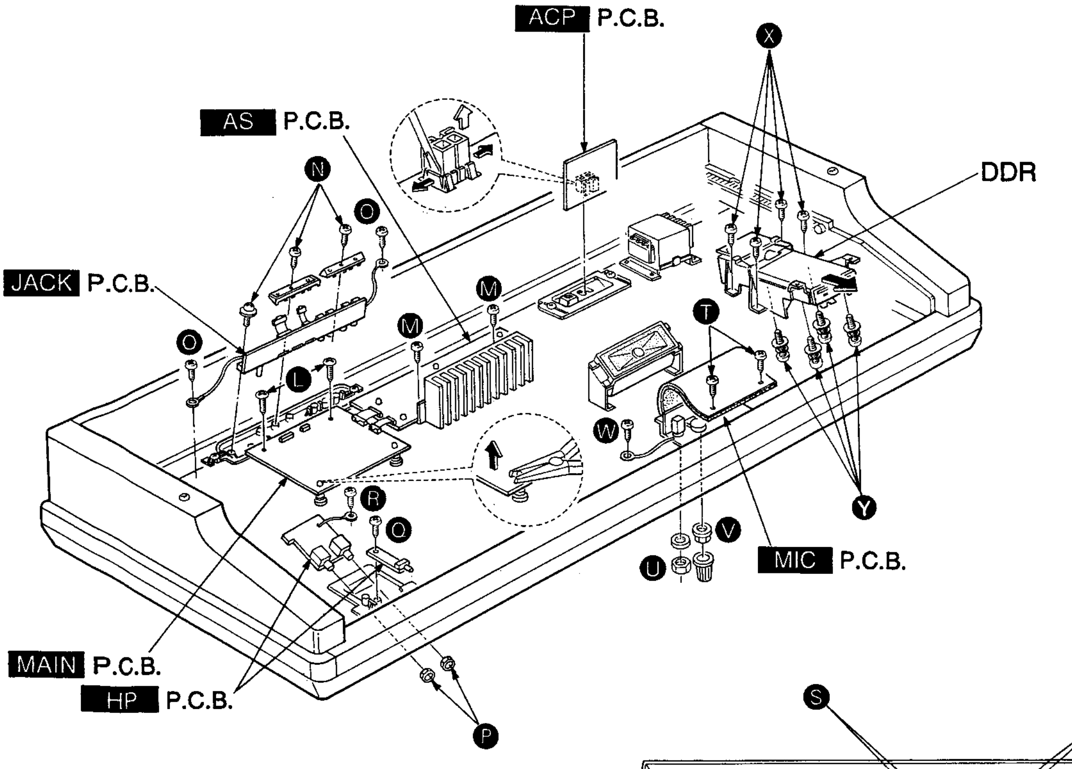
1. Remove the control panel (See Step 3).
2. Remove the LCD P.C.B. mounting screws (🅢 4 pcs.).

MIC P.C.B.

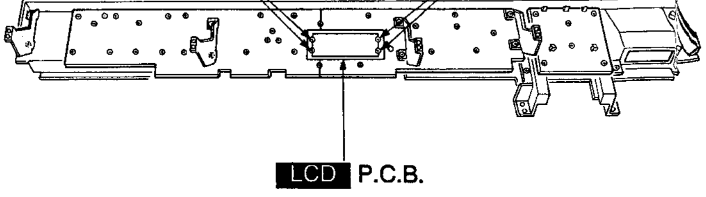
1. Remove the keyboard assembly (See Step 4).
2. Remove the MIC P.C.B. cover mounting screws (🅣 2 pcs.).
3. Remove the MIC volume knob and then remove the MIC P.C.B. mounting nuts (🅤 1 pc. and 🅥 1 pc.).
4. Remove the ground wire holding screws (🅦 1 pc.).

12 Removing the digital disk recorder (DDR)

1. Remove the control panel (see Step 3).
2. Remove the chassis on which DDR is attached and then remove (🅧 4 pcs. and 🅨 4 pcs.).
3. Pull out the DDR from the connector.



[Fig.16]



[Fig.17]

SYMPTOMS WHICH APPEAR TO BE SIGNS OF TROUBLES

The following changes in performance may occur in Technics Digital Ensemble but do not indicate trouble.

Phenomenon		Remedy
Sounds and effects	The buttons, keys, etc. malfunction.	• Turn off the **POWER** button once, then turn it on again. If this procedure is not successful, turn off the **POWER** button once. Then, while pressing the three lower left buttons in the **RHYTHM SELECT** section (**ROCK/DISCO, MODERN ROCK** and **ROCK** [OTHERS]) at the same time, turn the **POWER** button on again. (Note that, in this case, all programmable settings, functions and memories return to their factory-preset status.)
	No sound is produced when the keys are pressed.	• The **MAIN VOLUME** is at the minimum setting. Adjust the volume with the **MAIN VOLUME** control. • The volumes for the selected parts are set to the minimum levels. Use the sliding **BALANCE** control to set the volumes of the relevant parts to appropriate levels. • The LOCAL CONTROL for a part performed on the keyboard is set to OFF. Set the LOCAL CONTROL to ON.
	Only percussion instrument sounds are produced when the keyboard is played.	• In the **SOUND SELECT** section, the **KEYBOARD PERC** button is on.
	The sustain does not work even when the sustain pedal is depressed.	• The sustain pedal is not connected. Connect the pedal cord firmly to the **PEDAL IN** terminal on the back of the instrument. • When the **SUSTAIN PEDAL** button is off, the sustain does not work even when the pedal is depressed. Turn on the **SUSTAIN PEDAL** button.
	The sostenuto pedal and soft pedal do not operate properly. For example, when the soft pedal is depressed, the rhythm starts or a fill-in is played.	• Different functions can be programmed in these pedals. You can return the pedals to their original functions by turning off the instrument once, or by using the PEDAL SETTING mode.
Rhythm	The rhythm does not start.	• The **DRUMS** volume is set to the minimum level. Use the sliding **BALANCE** control to set the **DRUMS** volume to an appropriate level. • In the **RHYTHM SELECT** section, a **COMPOSER** rhythm in bank **A** or bank **B** with no stored pattern was selected. Select a different rhythm. • A **SEQUENCER** track button is on. When you are not playing back the **SEQUENCER** performance, turn off the track buttons. • CLOCK is set to MIDI. Set CLOCK to INTERNAL.
AUTO PLAY CHORD	No sound is produced for the automatic accompaniment.	• In the **RHYTHM SELECT** section, a **COMPOSER** rhythm in bank **A** or bank **B** with no stored pattern was selected. Select a different rhythm.
	No sound is produced for the automatic accompaniment, or only the sounds of some parts are produced.	• Some or all of the **ACCOMP 1, 2,** and **3** buttons are turned off. Press the buttons to turn them on. • The **ACCOMP** volumes are set to the minimum level. Use the sliding **BALANCE** control to set the volumes to appropriate levels.

Phenomenon		Remedy
SEQUENCER	Storage is not possible.	• The remaining memory capacity of the **SEQUENCER** is 0. Follow the SONG CLEAR or TRACK CLEAR procedure to erase the memory.
	Multi-track storage is not possible.	• The playback track has been selected, but the **START/STOP** button has not been pressed. A flashing track indicator shows the track which is ready for recording, and a lit track indicator shows a track which is ready for playback. To record one track while listening to another (playback) track, press the **START/STOP** button to begin playback.
COMPOSER	Storage is not possible.	• The remaining memory capacity of the **COMPOSER** is 0.
	Setting the time signature and number of measures is not possible.	• The time signature and number of measures cannot be changed for a pattern which is currently recorded in the **COMPOSER**. If you wish to change the time signature and/or measure data, first follow the procedure to clear the memory.
	The playback timing of the rhythm pattern is different from the timing with which it was recorded.	• The QUANTIZE function was on when the pattern was recorded and the timing was automatically corrected. Set the quantize level to a smaller note unit or to OFF when recording.
Disk Drive	The Disk Drive produces a noise during recording or playback.	• This occurs when the Disk Drive is reading a disk. It does not indicate a problem.
	When the procedure to load from a disk is performed, the contents of the piano memory are erased.	• When performing the load operation from a disk, the piano memory changes to that of the data loaded from the disk. If you wish to preserve a song which is stored in the piano memory, save it on a disk before performing the load procedure.
Other	Noise from a radio or TV can be heard.	• This sometimes occurs when electrical equipment such as a radio or TV is used near the instrument. Try moving such electrical equipment further away from the instrument. • The sound may be coming from a nearby broadcast station or amateur radio station. If the sound is bothersome, consult your dealer or service center.
	The cabinet becomes warm during use.	• This instrument has a built-in power source that heats the cabinet to some degree. This is not an indication of trouble.

ERROR DISPLAY

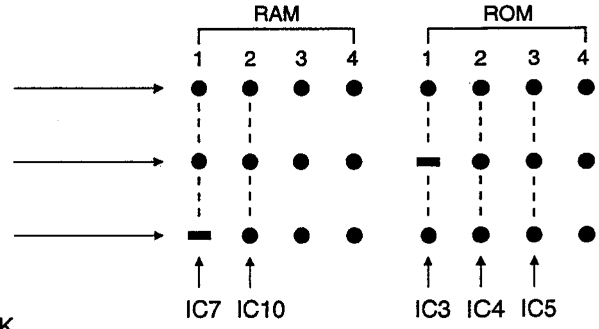
If an error message appears on the display, follow the appropriate steps to remedy the problem.

No.	Contents
00	The data on the disk that you are using is for a different product.
01	An error has occurred while the disk was loading. Please try again!
02	There is no disk in the Disk Drive.
03	The file that you tried to load is empty.
05	An error has occurred while the disk was saving. Please try again!
06	The disk that you are using is write protected. Please remove the write protection and try again.
07	The disk that you are using is full. Please use another disk.
08	An error has occurred while the disk was formatting. The disk that you are using may be faulty. Please try formatting another disk.
10	The data is already copy protected.
11	The password that you entered is incorrect.
20	A problem has occurred with your **SEQUENCER** data. This might be due to a damaged or faulty disk.
21	Memory full
22	It is necessary to press PUNCH OUT to complete this procedure.
23	It is impossible to change the time signature because it has already been set in the existing tracks.

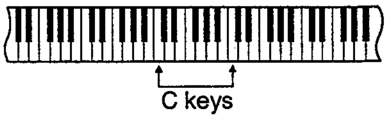
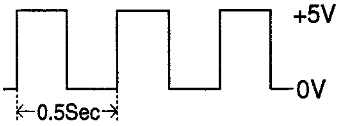
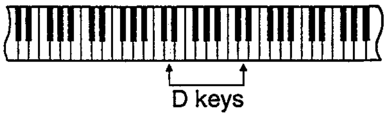
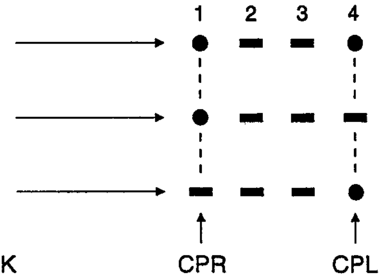
No.	Contents
24	A RHYTHM track already exists. It is impossible to assign two tracks to RHYTHM.
26	It is only possible to merge melody tracks. Tracks such as RHYTHM, CHORD and CONTROL cannot be merged.
27	It is only possible to copy melody tracks. Tracks such as RHYTHM, CHORD and CONTROL cannot be copied.
28	This song is too long to be saved as a MIDI file.
29	The MIDI file that you have tried to load exceeds the memory capacity of this PR and cannot be played. The **SEQUENCER** memory has been cleared.
30	It is not possible to change the time signature or measure length of a **COMPOSER** pattern after it has been recorded. If you want to proceed, you must first clear the entire **COMPOSER** pattern.
32	Memory full
43	The file that you are trying to load was saved on a previous PR. It is only possible to load using the "ALL" option.
45	This software format is not supported by the PR and cannot be loaded.

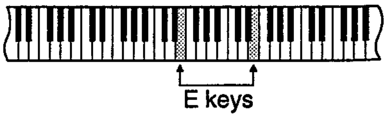
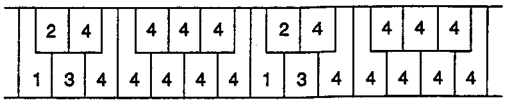
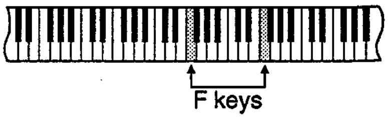
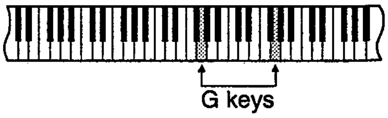
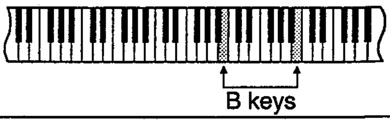
ABOUT THE SELF-DIAGNOSTIC FUNCTION

This model has some self-diagnostic capabilities. When set to the self-diagnostic mode, operation of various components can be verified by following the procedures in the chart below.

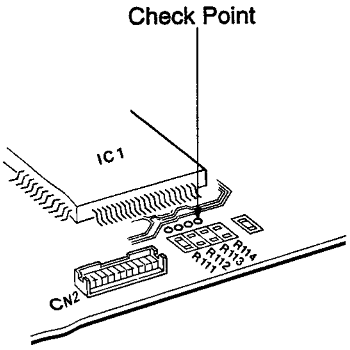
<table>
<tr><th>No.</th><th>PCB</th><th>TEST MODE</th><th>Procedure</th></tr>
<tr><td rowspan="2">1</td><td rowspan="2">MAIN</td><td>RAM (IC7,10), ROM (IC3,4,5) check</td><td>1. Connect the CHECKING DEVICE (refer to page I-16) to CN 3 on the MAIN P.C.B., and turn on the CHECKING DEVICE switch.
2. Turn on the power switch.</td></tr>
<tr><td colspan="2">When the power switch is turned on, the LED of the CHECKING DEVICE flashes 8 times. The first 4 flashes are for the RAM check, and the latter 4 flashes are for the ROM check. The order of the LED flashes corresponds to the respective IC numbers as shown below. If an IC is defective, the corresponding flash time is longer.
Examples
1. RAM OK, ROM OK
2. RAM OK, ROM (IC3) defective
3. RAM (IC7) defective, ROM OK


RAM
ROM
1
2
3
4
1
2
3
4
IC7
IC10
IC3
IC4
IC5

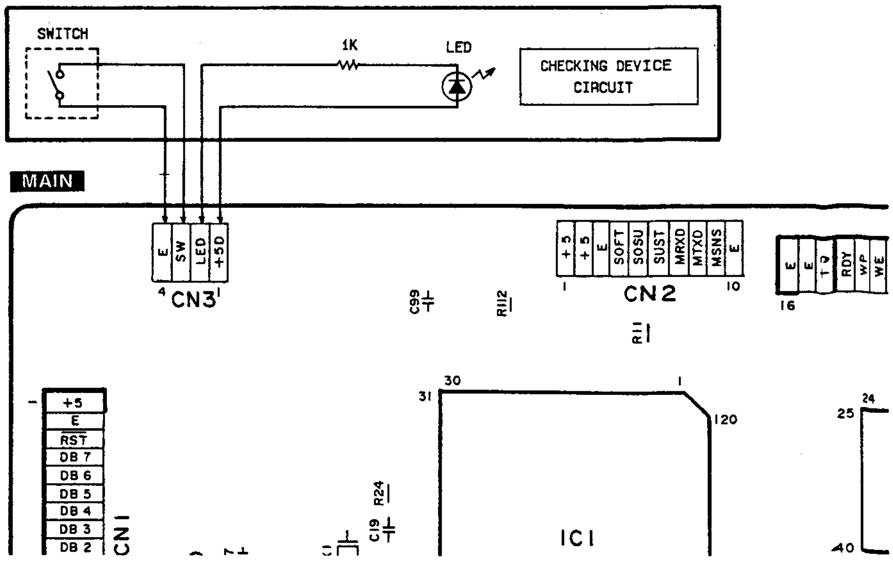
NOTE : ● indicates short flash time = OK
▬ indicates long flash time = Defective</td></tr>
<tr><td rowspan="2">2</td><td rowspan="2">MAIN</td><td>V53 Gate Array (IC2) check</td><td>Press and hold the two C keys shown below, and then turn on the power switch.
 </td></tr>
<tr><td colspan="2">Monitor pins (refer to page I-16) on oscilloscope, and check whether data (see figure) is output.
 </td></tr>
<tr><td rowspan="2">3</td><td rowspan="2">CPL
CPR</td><td>Control panel CPU check</td><td>1. Connect the CHECKING DEVICE to CN 3 on the MAIN P.C.B. (The Checking Device switch should be off).
2. On the control panel, set all the sliding BALANCE controls to OFF.
3. Press and hold the two D keys shown below, and then turn on the power switch.
 </td></tr>
<tr><td colspan="2">When the power switch is turned on, the LED of the CHECKING DEVICE flashes 4 times. The order of the LED flashes corresponds to the CPU (IC) on the respective P.C.B.s as shown below. If an IC is defective, the corresponding flash time is longer.
1. OK
2. CPL CPU defective
3. CPR CPU defective

NOTE : ● indicates short flash time = OK
▬ indicates long flash time = Defective</td></tr>
</table>

No.	PCB	TEST MODE	Procedure
4	MAIN	Wave ROM check MAIN : IC13-16	1. Press and hold the two E keys shown below, and then turn on the power switch. 2. Select the SPECIAL PERC sound.  E keys
		When set to the self-diagnostic mode, the Wave ROM outputs a sine wave. The Wave ROMs correspond to the keyboard keys as shown in the diagram to the right. When a key is pressed, the corresponding sine wave sound is produced. If no sound is produced, or if the sound is distorted, the Wave ROM corresponding to that key is defective.	• The key number indicates the Wave ROM number. (1:IC13, 2:IC14, 3:IC15, 4:IC16) 
5	CPL CPR CPSQ	LED & SW check	Press and hold the two F keys shown below, and then turn on the power switch.  F keys
		All the LEDs turn off after lighting once. Confirm that all the LEDs light.	
6	LCD	LCD Display check	Press and hold the two G keys shown below, and then turn on the power switch.  G keys
		All dots of the LCD screen will light for 10 seconds, then they will light again at a darker contrast setting before returning to the main screen.	
7	MKB	Keyboard ROM (IC2) check	While pressing the two B keys simultaneously, turn on the power switch.  B keys
		If the keyboard ROM (IC2) is OK, one confirming beep will sound. If it is defective, several consecutive error beeps will sound.	

■ Check point of No.2


Check Point
IC1
CN2
R111
R112
R113
R114

■ Connection between serving CHECKING DEVICE and MAIN P.C.B.


SWITCH
1K
LED
CHECKING DEVICE CIRCUIT
MAIN
E
SW
LED
+5D
4
CN3
1
C99
R112
R11
+5
+5
E
SOFT
SOSU
SUST
MRXD
MTXD
MSNS
E
1
CN2
10
E
E
RDY
WP
WE
16
30
1
31
120
24
25
40
+5
E
RST
DB 7
DB 6
DB 5
DB 4
DB 3
DB 2
CN1
R24
C19
IC1

MIDI IMPLEMENTATION CHART

Digital Ensemble [SX-PR307/307K] **(Transmitted)**

Function		RIGHT, PART2, PART4～15	LEFT	PART16	ACMP1	ACMP 2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
Mode	Default	3	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
	Messages	×	×	×	×	×	×	×	×	×	
	Altered	–	×	–	–	–	–	–	–	–	
Note Number		0-119	0-119	0-119	0-119	0-119	0-119	0-119	0-119	–	Changes depending on the position of the transpose control,octave shift,and drums type.
	True voice	–	–	–	–	–	–	–	–	–	
Velocity	Note ON	○	○	○	○	○	○	○	○	–	
	Note OFF	×	×	×	×	×	×	×	×	–	
After Touch	Key's	×	×	×	×	×	×	×	×	–	
	Ch's	×	×	×	×	×	×	×	×	–	
Pitch Bender		○*	○*	×	○*	○*	○*	×	○*	×	
Control Change	0,32	○	○	○	○**	○**	○**	○	○	×	bank select MSB, LSB
	1	○*	○*	×	○*	○*	○*	×	○*	×	modulation
	6,38	○	○	×	×	×	×	×	×	×	data entry MSB, LSB
	7	○	○	○	○	○	○	○	○	×	volume
	10	○	○	×	×	×	×	×	×	×	panpot
	11	○*	○*	○*	×	×	×	×	×	×	expression
	64	○	○	×	○**	○**	○**	×	×	×	sustain
	66	○	○	×	×	×	×	×	×	×	sostenute pedal
	67	○	○	×	×	×	×	×	×	×	soft pedal
	80	○	○	×	×	×	×	×	×	×	auto play chord
	82	○	○	×	×	×	×	○	×	×	intro, fill in, ending
	91	○	○	○	○	○	○	○	○	○	reverb
	93	○	○	×	○**	○**	○**	×	○	×	digital effect
	100,101	○	○	×	×	×	×	×	×	×	RPN LSB, MSB
	120	○*	○*	○*	×	×	×	×	×	×	all sound off
	121	○*	○*	○*	×	×	×	×	×	×	reset all cotrollers
Prog Change		○	○	○	○**	○**	○**	○	○	×	Changes depending on program change mode and prog.cng to p.mem.
	True #	–	–	–	–	–	–	–	–	–	
System exclusive		○									
System common	Song Pos	○×*									
	Song Sel	○×*									0-19
	Tune	×									
System Real Time	Clock	○									
	Commands	○×*									start/stop,continue
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	×	–	
	All notes OFF	×	×	×	×	×	×	×	×	–	
	Active Sense	○									
	Reset	×									
Notes		○×*·········Whether or not the data for each of these items is transmitted can be set. ○* ············Transmitted during SEQUENCER playback and during rhythm performance. ○**············Transmitted during COMPOSER recording.									

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○ :Yes
Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO × :No

Digital Ensemble [SX-PR307/307K] **(Recognized)**

Function		RIGHT, PART2, PART4~15	LEFT	PART16	ACMP1	ACMP2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
Mode	Default	3	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
	Messages	×	×	×	×	×	×	×	×	×	
	Altered	–	–	–	–	–	–	–	–	–	
Note Number		0-127	–	0-127	0-127	0-127	0-127	0-127	0-127	–	Changes depending on the position of the transpose control,octave shift, and drums type.
	True voice	0-127	–	0-127	0-127	0-127	0-127	0-127	0-127	–	
Velocity	Note ON	○	○	○	○	○	○	○	○	–	
	Note OFF	×	×	×	×	×	×	×	×	–	
After Touch	Key's	×	×	×	×	×	×	×	×	–	
	Ch's	×	×	×	×	×	×	×	×	–	
Pitch Bender		○	○	×	○	○	○	×	○	–	
Control Change	0,32	○	○	○	○**	○**	○**	○	○	×	bank select MSB, LSB
	1	○	○	×	○	○	○	×	○	×	modulation
	6,38	○	○	×	×	×	×	×	×	×	data entry MSB, LSB
	7	○	○	○	○	○	○	○	○	×	volume
	10	○	○	×	×	×	×	×	×	×	panpot
	11	○	○	○	×	×	×	×	×	×	expression
	64	○	○	×	○**	○**	○**	×	×	×	sustain
	66	○	○	×	×	×	×	×	×	×	sostenute pedal
	67	○	○	×	×	×	×	×	×	×	soft pedal
	80	×	○	×	×	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	×	○	×	×	intro, fill in, ending
	91	○	○	○	○	○	○	○	○	○	reverb
	93	○	○	×	○**	○**	○**	×	○	×	digital effect
	100,101	○	○	×	×	×	×	×	×	×	RPN LSB, MSB
	120	○	○	○	○	○	○	○	○	×	all sound off
	121	○	○	○	○	○	○	○	○	×	reset all cotrollers
Prog Change		○	○	○	○**	○**	○**	○	○	×	Changes depending on program change mode and prog.cng to p.mem.
	True #	–	–	–	–	–	–	–	–	–	
System exclusive		○									
System common	Song Pos	○×*									0-19
	Song Sel	○×*									
	Tune	×									
System Real Time	Clock	○									
	Commands	○×*									start/stop,continue
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	×	–	
	All notes OFF	○	○	○	○	○	○	○	○	–	
	Active Sense	○									
	Reset	×									
Notes		○×*…………Whether or not the data for each of these items is received can be set. ○** …………Recognized during COMPOSER recording.									

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○:Yes
Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×:No

PRECAUTIONS BEFORE SERVICING

■ Precautions for measuring of the output waveforms.

1. The waveform was measured with a "National Digital Storage Oscilloscope VP-5730A". Therefore the waveforms of musical tone signals shown may differ somewhat due to the difference in the timing of triggering.
2. Since the 1/10 test probe is used, the indicated voltage value on the bottom part of each waveform photo is 1/10 of the actual value (e.g. 0.2 V/cm should be 2.0 V/cm).
3. To measure the waveforms, first set this unit to the self-diagnostic mode (refer to page I-16, No. 4). The Wave ROM output will then be output as a sine wave to facilitate the servicing check.

■ Important safety notice:

Components identified by a ⚠ mark have special characteristics impotant for safety.
When replacing any of these components, use only manufacture's specified parts.

■ Symbolic Marks

The symbolic marks for resistors and capacitors which used in this circuits are classified as following TABLE-1 and TABLE-2.

1. RESISTORS
   - Resistors without symbolic mark are FIXED CARBON FILM RESISTORS (ERD-type).
   - All resistors are 1/4 WATT, ±5 % TOLERANCE unless otherwise designated in schematic diagrams.

(TABLE-1)

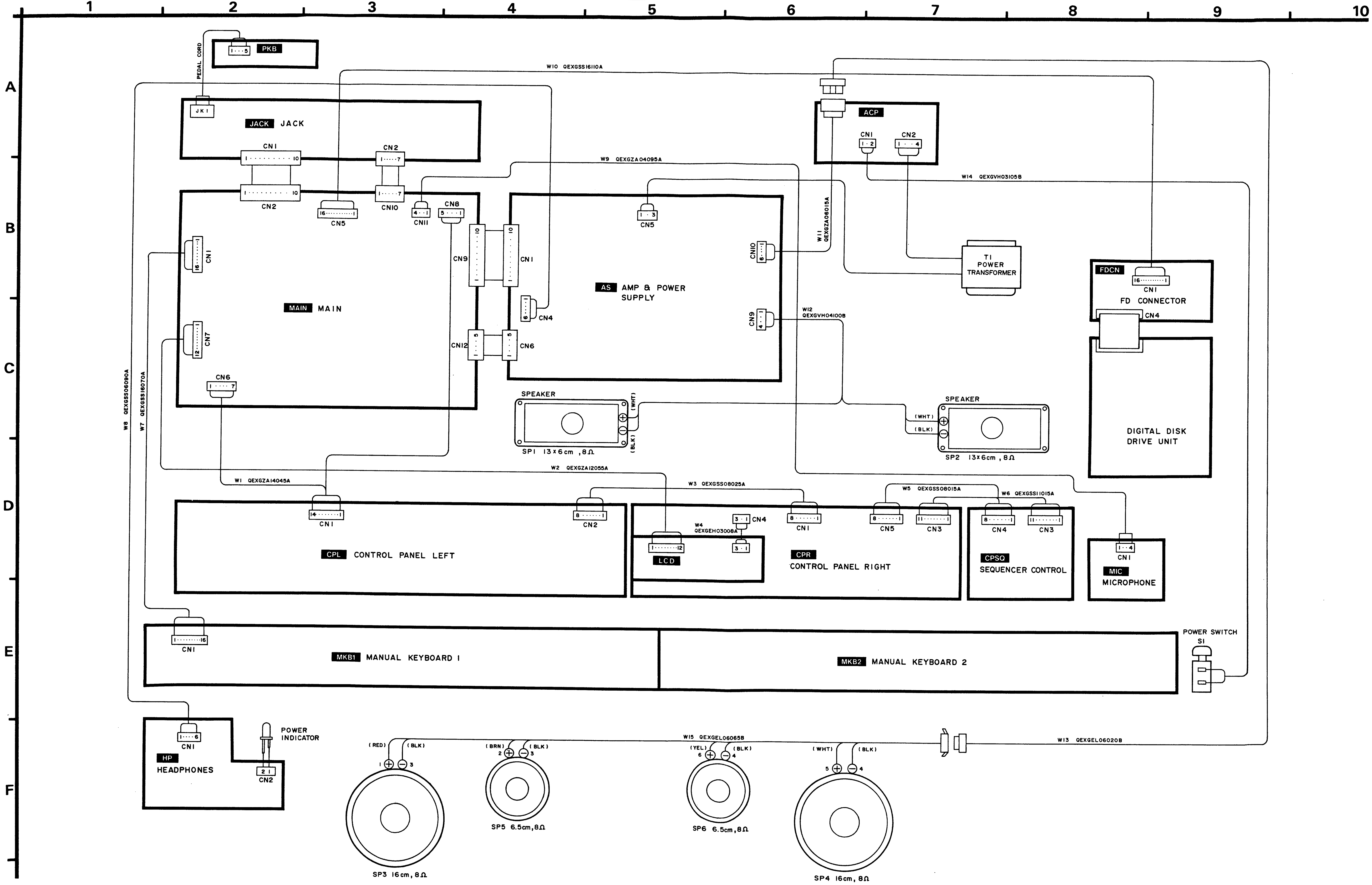
SYMBOL	SPECIFICATION	SYMBOL	SPECIFICATION
Ⓕ	Fixed Carbon Film Resistors " FLAME-PROOF " (ERD—F—type)	Ⓕ	Fixed Metal Film Resistors " FLAME-PROOF " (ERX—type)
Ⓕ	Fixed Wire Wound Resistors " FLAME-PROOF " (ERF—type)	🄵	Fuse Type Fixed Metal Oxide Film Resistors " FLAME-PROOF " (ERQ—type)
Ⓕ	Fixed Metal Oxide Film Resistors " FLAME-PROOF " (ERG—type)	🄵	Fuse Type Fixed Carbon Film Resistors " FLAME-PROOF " (ERD2FC—type)
Ⓖ	Fixed Metal Film Resistors (Precision and High Stability) (ERO—type)		

2. CAPACITORS
   - Capacitors without symbolic mark are POLYESTER CAPACITORS. (ECQM-type, ECQG-type, ±10 % Tolerance)
   - Polarized capacitors without symbolic mark are Aluminum Electrolytic Capapcitors. (ECEA-type, ±20 % Tolerance)

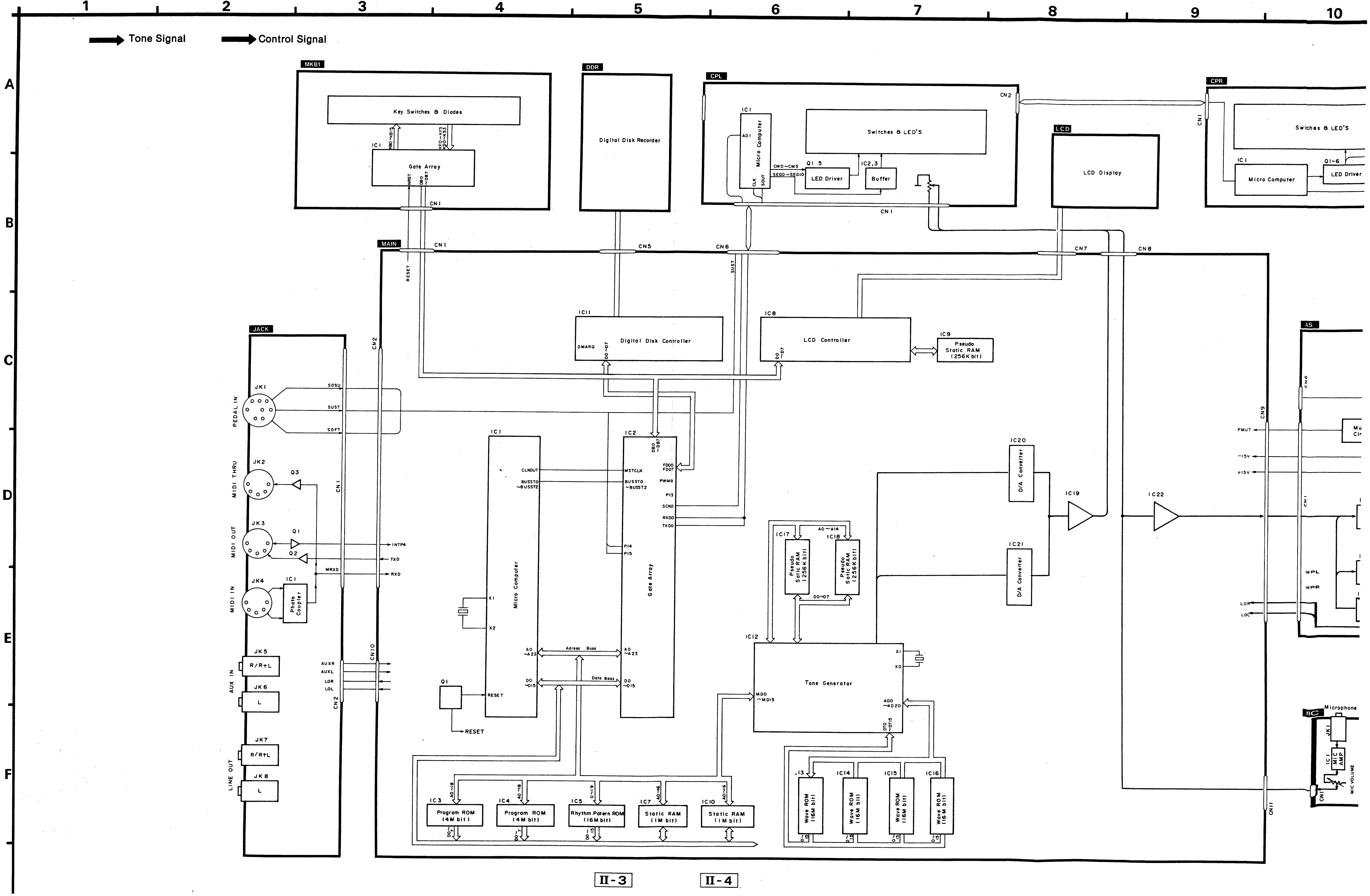
(TABLE-2)

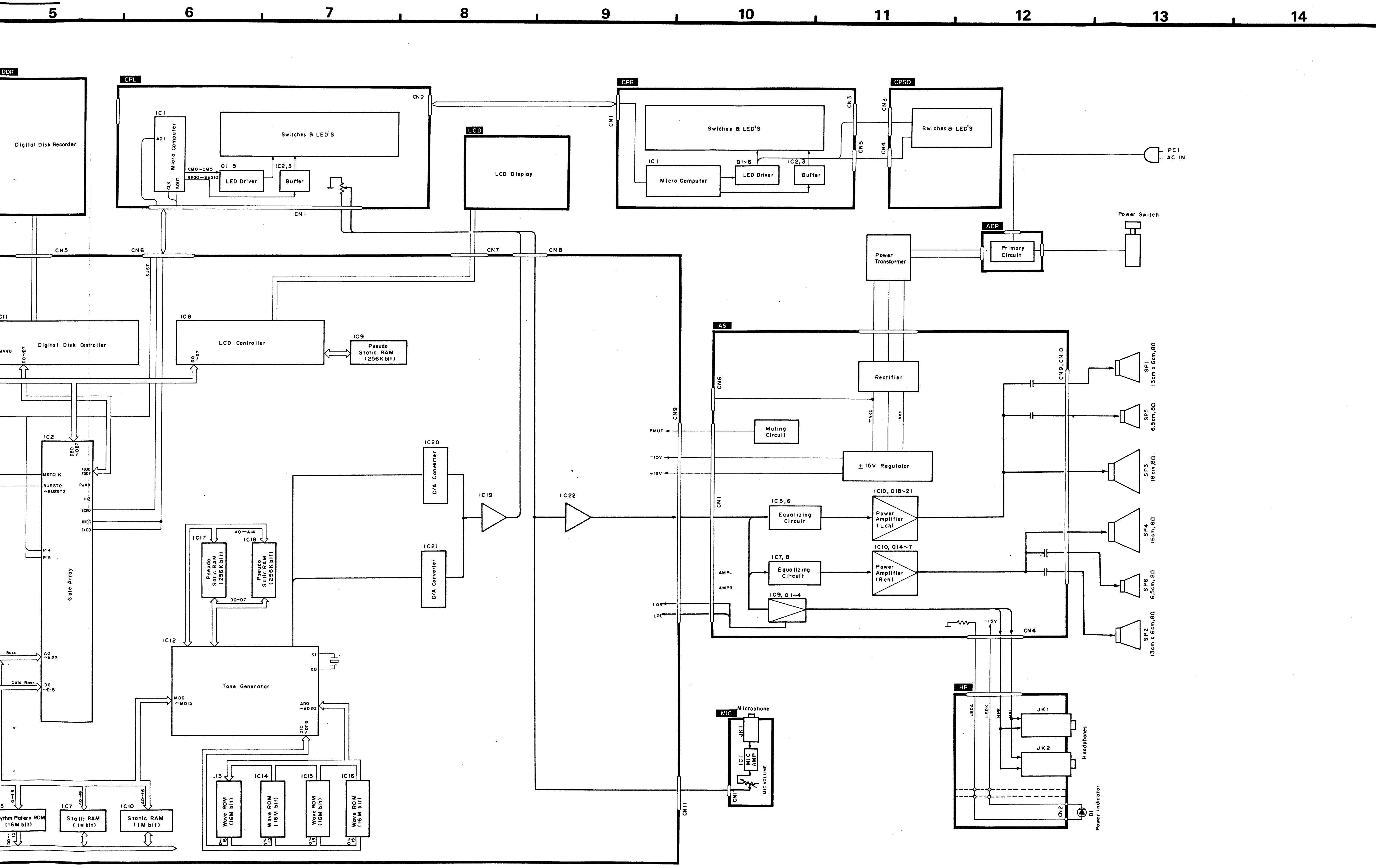
SYMBOL	SPECIFICATION	TYPE
Ⓝ	Non-Polarized Electrolytic Capacitors	ECEA_KN_type
Ⓨ	Non-Polarized Electrolytic (for Network System)	ECEA_Y_type
Ⓣ	Tantalum Solid Electrolytic Capacitors	ECS_type
(TF)	Metalized Plastic Film Capacitors (TF Series)	ECQV_type
○	Temperature Compensating Ceramic Capacitors	ECC_type
	High-Dielectric Constant Ceramic Capacitors	ECK_type ECR_type
	Axial Lead Ceramic Capacitors	ECB_type
	Metalized Polyester Film Capacitors for Across the Line	ECQ_EW_type
	Aluminum Electrolytic Capacitors for Smoothing Circuit	ECES_type
	Multilayer Ceramic Chip Capacitors	ECUV_type

WIRING CONNECTION DIAGRAM


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
PKB
1···5
PEDAL CORD
W10 QEXGSS16110A
JK1
JACK JACK
CN1
1········10
CN2
1·····7
ACP
CN1
1·2
CN2
1···4
W9 QEXGZA04095A
W14 QEXGVH03105B
CN2
CN5
CN10
CN11
CN8
16·········1
1·········10
1·····7
4··1
5···1
1·3
CN5
W11
QEXGZA06015A
CN9
CN1
1···10
10
CN10
6···1
T1
POWER
TRANSFORMER
FDCN
CN1
16·······1
FD CONNECTOR
CN4
16······1
MAIN MAIN
AS AMP & POWER SUPPLY
CN4
6···1
W12
QEXGVH04100B
CN9
4···1
12······1
CN7
CN12
1···5
CN6
1···5
CN6
1····7
W8 QEXGSS06090A
W7 QEXGSS16070A
SPEAKER
(WHT)
(BLK)
SP1 13x6cm ,8Ω
SPEAKER
(WHT)
(BLK)
SP2 13x6cm ,8Ω
DIGITAL DISK
DRIVE UNIT
W2 QEXGZA12055A
W1 QEXGZA14045A
W3 QEXGSS08025A
W5 QEXGSS08015A
W6 QEXGSS11015A
14·······1
CN1
8······1
CN2
CPL CONTROL PANEL LEFT
3·1 CN4
W4
QEXGEH03008A
1·······12
LCD
3·1
8······1
CN1
8······1
CN5
11·······1
CN3
CPR
CONTROL PANEL RIGHT
8······1
CN4
11·······1
CN3
CPSQ
SEQUENCER CONTROL
1··4
CN1
MIC
MICROPHONE
1·······16
CN1
MKB1 MANUAL KEYBOARD 1
MKB2 MANUAL KEYBOARD 2
POWER SWITCH
S1
1···6
CN1
HP
HEADPHONES
POWER
INDICATOR
2 1
CN2
W15 QEXGEL06065B
(RED)
(BLK)
1
3
(BRN)
(BLK)
2
3
(YEL)
(BLK)
6
4
(WHT)
(BLK)
5
4
W13 QEXGEL06020B
SP3 16cm, 8Ω
SP5 6.5cm, 8Ω
SP6 6.5cm, 8Ω
SP4 16cm, 8Ω

BLOCK DIAGRAM


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
Tone Signal
Control Signal
MKB1
Key Switches & Diodes
KB0~KB15
KS0~KS3
KE0~KE3
IC1
Gate Array
NRST
DB0~DB7
CN1
DDR
Digital Disk Recorder
CPL
CN2
IC1
AD1
Micro Computer
CLK
SOUT
Switches & LED'S
CM0~CM5
SEG0~SEG10
Q1 5
LED Driver
IC2,3
Buffer
CN1
CPR
CN1
Swiches & LED'S
IC1
Micro Computer
Q1~6
LED Driver
LCD
LCD Display
MAIN
CN1
CN5
CN6
CN7
CN8
RESET
SUST
IC11
Digital Disk Controller
DMARQ
D0~D7
IC8
LCD Controller
D0~D7
IC9
Pseudo Static RAM (256K bit)
JACK
JK1
PEDAL IN
SOSU
SUST
SOFT
JK2
MIDI THRU
Q3
JK3
MIDI OUT
Q1
Q2
JK4
MIDI IN
IC1
Photo Coupler
MRXD
INTP4
TXD
RXD
CN1
CN2
JK5
R/R+L
JK6
L
AUX IN
AUXR
AUXL
LOR
LOL
CN10
CN2
JK7
R/R+L
JK8
L
LINE OUT
IC1
CLKOUT
BUSST0~BUSST2
Micro Computer
X1
X2
A0~A23
D0~D15
RESET
Q1
RESET
IC2
DB0~DB7
MSTCLK
BUSST0~BUSST2
FDD0~FDD7
PWM0
P13
SCK0
RXD0
TXD0
P14
P15
Gate Array
A0~A23
D0~D15
Adress Buss
Data Buss
IC3
Program ROM (4M bit)
A0~18
D0~7
IC4
Program ROM (4M bit)
A0~18
D0~7
IC5
Rhythm Patern ROM (16M bit)
A0~19
D0~15
IC7
Static RAM (1M bit)
A0~16
IC10
Static RAM (1M bit)
A0~16
IC17
IC18
A0~A14
Pseudo Static RAM (256K bit)
Pseudo Static RAM (256K bit)
D0~D7
IC12
Tone Generator
MD0~MD15
X1
X0
AD0~AD20
DT0~DT15
IC13
IC14
IC15
IC16
Wave ROM (16M bit)
Wave ROM (16M bit)
Wave ROM (16M bit)
Wave ROM (16M bit)
D0~15
IC20
D/A Converter
IC21
D/A Converter
IC19
IC22
CN9
CN11
AS
CN6
PMUT
−15V
+15V
CN1
MPL
MPR
LOR
LOL
MIC
Microphone
JK1
IC1
MIC AMP
MIC VOLUME
CN1

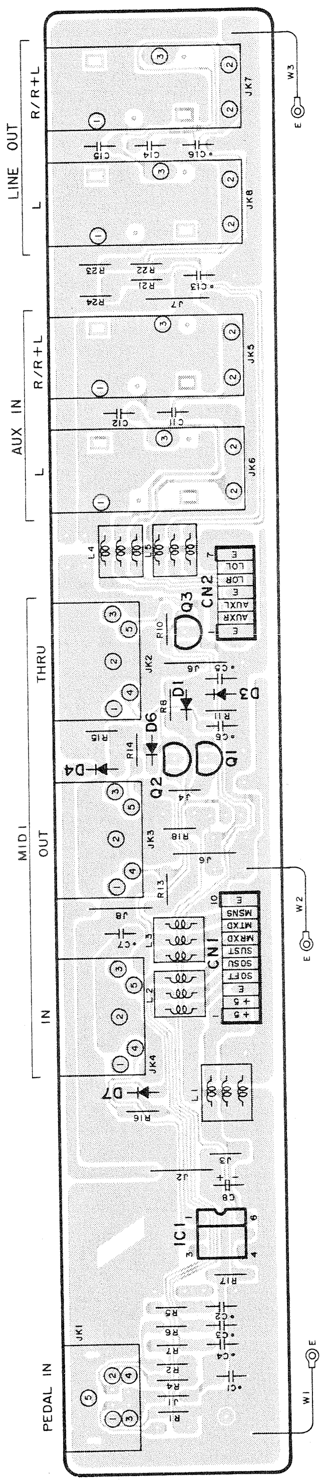

5
6
7
8
9
10
11
12
13
14
DDR
Digital Disk Recorder
CPL
IC1
Micro Computer
AD1
CLK
SOUT
CM0~CM5
SEG0~SEG10
Q1 5
LED Driver
IC2,3
Buffer
Switches & LED'S
CN2
CN1
LCD
LCD Display
CPR
CN1
Swiches & LED'S
IC1
Micro Computer
Q1~6
LED Driver
IC2,3
Buffer
CN3
CN5
CPSQ
CN3
CN4
Swiches & LED'S
PC1
AC IN
Power Switch
ACP
Primary Circuit
Power Transformer
CN5
CN6
CN7
CN8
SUST
IC11
Digital Disk Controller
D0~D7
IC8
LCD Controller
D0~D7
IC9
Pseudo Static RAM (256K bit)
IC2
Gate Array
DB0~DB7
FDD0 FDD7
MSTCLK
BUSST0 ~BUSST2
PWM0
PI3
SCK0
RXD0
TXD0
PI4
PI5
Buss
A0~A23
Data Buss
D0~D15
IC20
D/A Converter
IC21
D/A Converter
IC19
IC22
IC17
IC18
A0~A14
Pseudo Satic RAM (256K bit)
Pseudo Satic RAM (256K bit)
D0~D7
IC12
Tone Generator
X1
X0
MD0~MD15
AD0~AD20
DT0~DT15
IC13
IC14
IC15
IC16
Wave ROM (16M bit)
Wave ROM (16M bit)
Wave ROM (16M bit)
Wave ROM (16M bit)
Rythm Patern ROM (16M bit)
IC7
Static RAM (1M bit)
IC10
Static RAM (1M bit)
A0~A16
A0~A16
D0~D15
CN9
CN11
PMUT
-15V
+15V
LOR
LOL
AS
CN6
CN1
Rectifier
+Vcc
-Vcc
Muting Circuit
±15V Regulator
IC5,6
Equalizing Circuit
IC10, Q18~21
Power Amplifier (Lch)
IC7, 8
Equalizing Circuit
IC10, Q14~7
Power Amplifier (Rch)
AMPL
AMPR
IC9, Q1~4
CN9, CN10
CN4
-15V
SP1 13cm x 6cm,8Ω
SP5 6.5cm,8Ω
SP3 16cm,8Ω
SP4 16cm, 8Ω
SP6 6.5cm, 8Ω
SP2 13cm x 6cm,8Ω
MIC
Microphone
JK1
IC1 MIC AMP
MIC VOLUME
CN1
HP
LEDA
LEDK
HPR
HPL
JK1
JK2
Headphones
CN2
D1 Power Indicator

MAIN **JACK**

MAIN AND JACK CIRCUIT BOARD

JACK

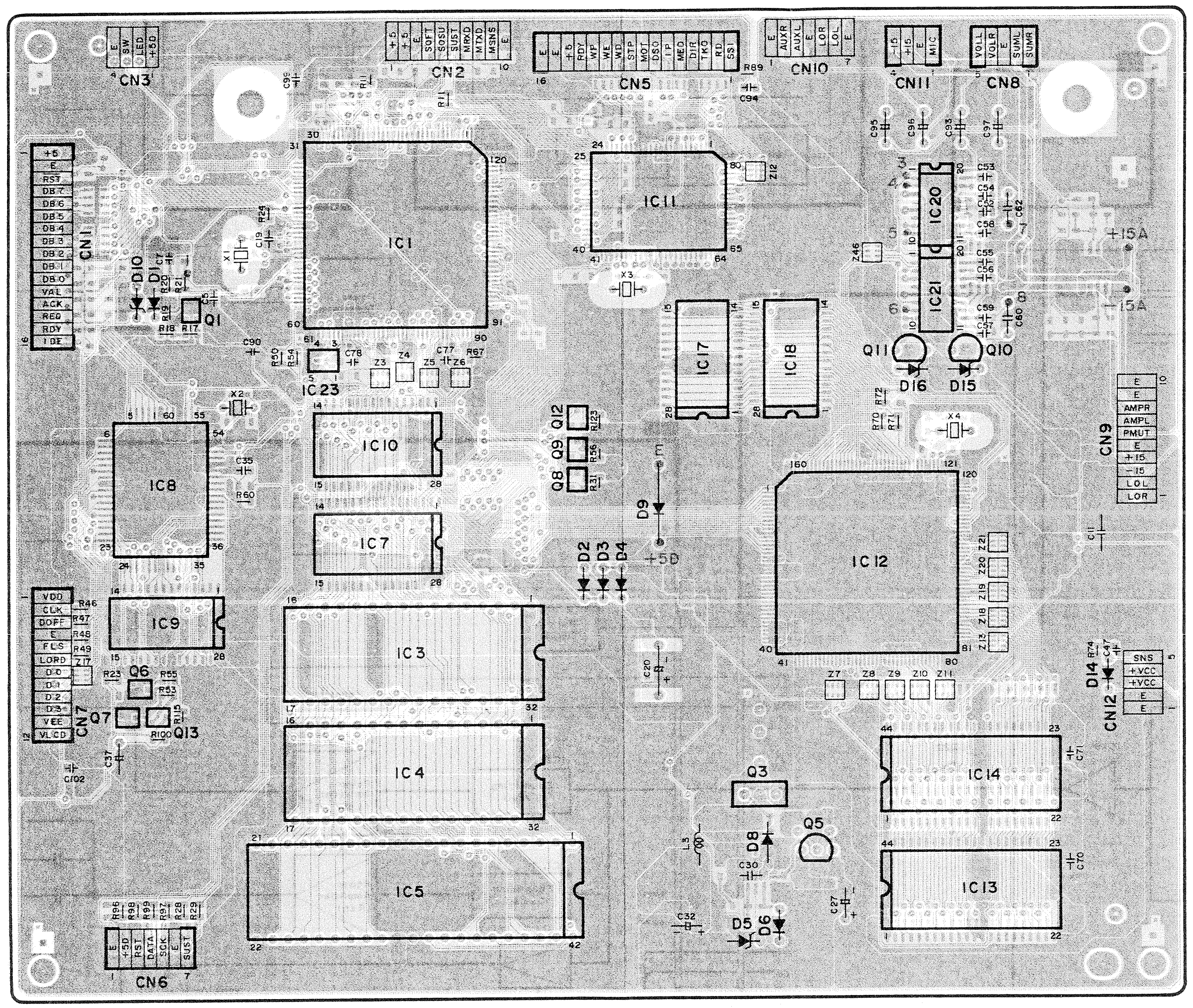
SXPG219611


LINE OUT
R/R+L
L
AUX IN
R/R+L
L
MIDI THRU
MIDI OUT
IN
PEDAL IN
JK1
JK2
JK3
JK4
JK5
JK6
JK7
JK8
CN1
CN2
IC1
Q1
Q2
Q3
D1
D3
D4
D6
D7
W1
W2
W3

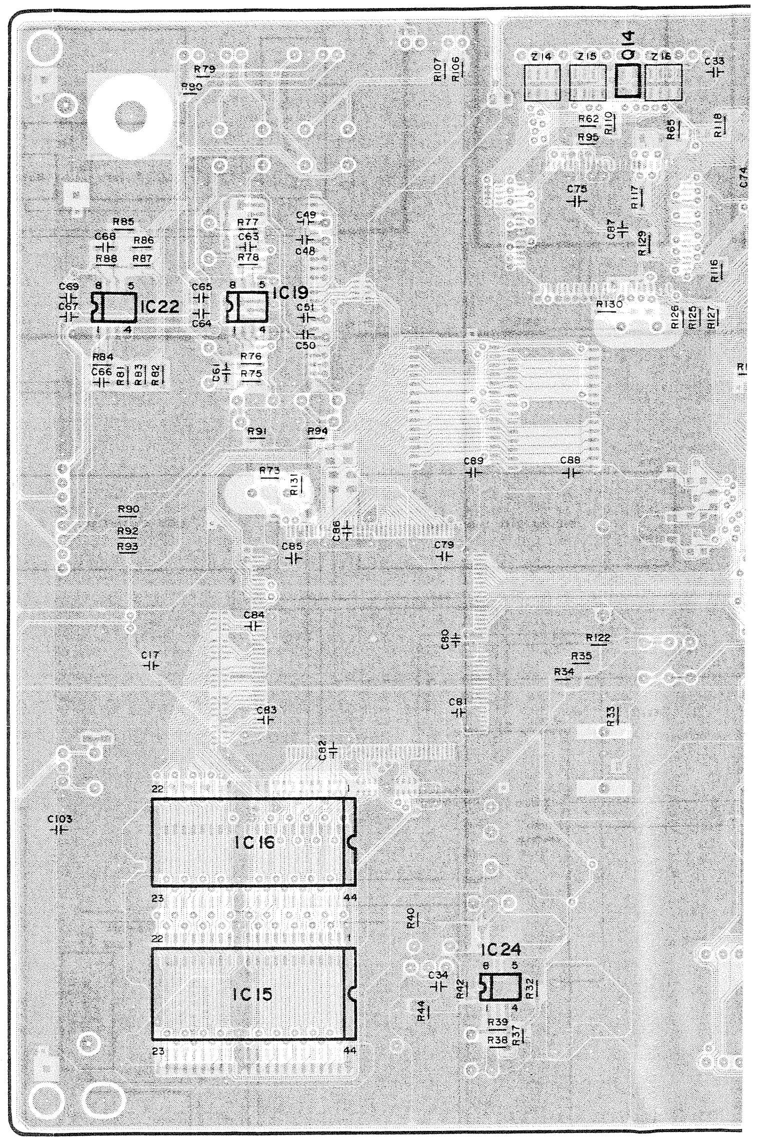
MAIN COMPONENT SIDE

Component Side

Foil Side


CN1
CN2
CN3
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN12
IC1
IC3
IC4
IC5
IC7
IC8
IC9
IC10
IC11
IC12
IC13
IC14
IC17
IC18
IC20
IC21
IC23
Q1
Q3
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
D2
D3
D4
D5
D6
D8
D9
D10
D11
D14
D15
D16
+15A
−15A
+5D

MAIN FOIL SIDE


IC15
IC16
IC19
IC22
IC24
Q14

Measuring Condition ■ 波形の測定条件

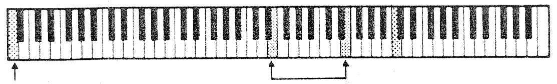
Check Point ❸～❽

Set to the self-diagnostic mode followings.

- While pressing two E keys (①) simultaneously, turn on the power switch.

次のように自己診断モードに設定してください。

- ２つのＥキー（①）を同時に押しながら、電源スイッチをオンする。
- SOUND.. SPECIAL PERC
- Main Volume .... MAX
- Keyboard.. A_1 (②)



② A_1 Key

① E keys (E_{44}・E_{56})

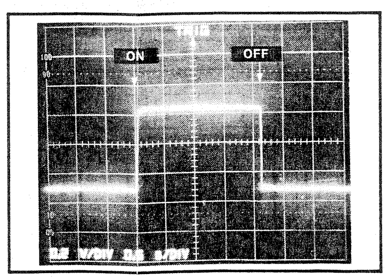
Check Point ❶

Set the initial setting mode (Refer to page Ⅰ-6)

イニシャルセッティングを行ってください。(Ⅰ-3 ページ参照)

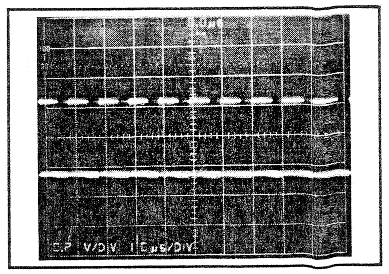
- SOUND.. SPECIAL PERC
- Main Volume .... MAX

❶ $\overline{\text{RESET}}$



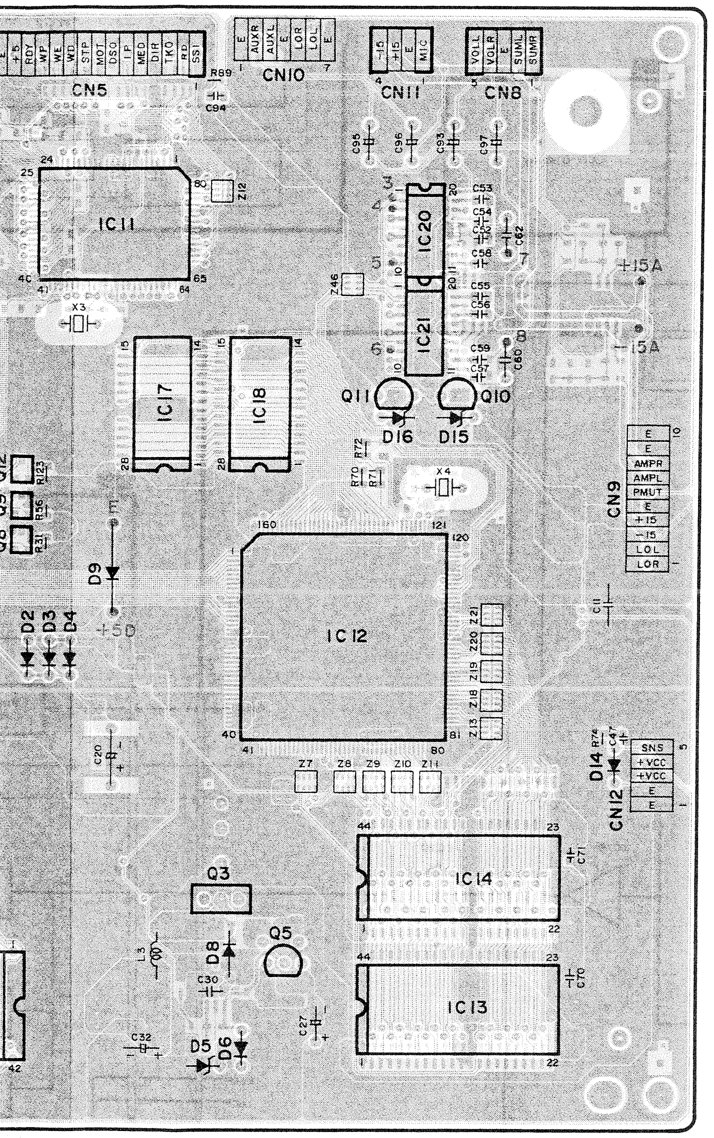
- Power SW.......................... ON → OFF

❸



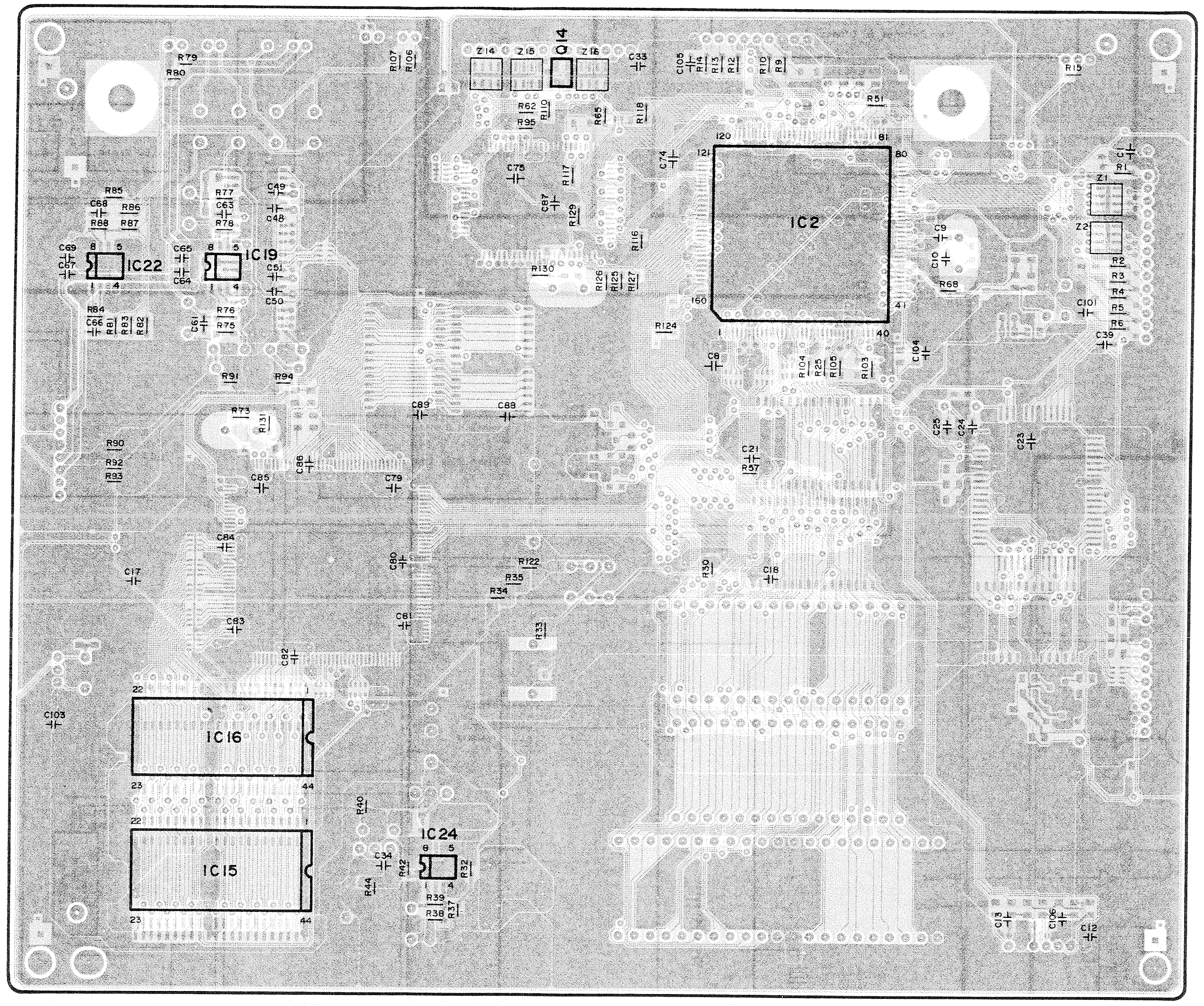
RD

▭ Component Side
▬ Foil Side


CN5
CN10
CN11
CN8
IC11
IC20
IC21
IC17
IC18
Q11
Q10
D16
D15
CN9
IC12
D9
D2
D3
D4
D14
CN12
IC14
IC13
Q3
Q5
D8
D5
D6
+15A
-15A
+5D

MAIN FOIL SIDE

SXPG217311


IC22
IC19
IC2
IC16
IC15
IC24
Q14

MAIN

NOTES:

- IC'S

IC1:	D70236AGD10
IC2:	D65046GD188
IC3:	QSIGCR307AX
IC4:	QSIGCR307BX
IC5:	QSIG03C08032
IC7, 10:	T518129AFWL8
IC8:	SED1330FBA
IC9:	HM65256BLF10
IC11:	D72068GF-3B9
IC12:	D93083GDLBD
IC13:	QSIGH3C16CH3
IC14:	QSIGH3C16CH4
IC15:	QSIGH3C16CH5
IC16:	QSIGH3C16CH6
IC17, 18:	TC51832AFL85
IC19, 22:	M5218AFP
IC20, 21:	PCM1702U
IC23:	TC7S00F
IC24:	BA10393F

- TRANSISTORS

Q1, 6, 7, 14:	2SB709ARTW
Q3:	2SB941
Q5, 10:	2SC1815GR
Q8, 9, 12, 13:	2SD601AQTW
Q11:	2SA1015-GR

- DIODES

D1～4, 6, 14:	MA162A
D5:	MA1047H
D8:	MA738
D9:	MA2062LF
D10:	MA1030
D15, 16:	MA1062M

JACK

NOTES:

- IC

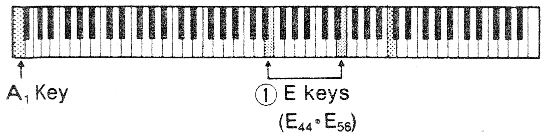
IC1:	SVIGTLP513

- TRANSISTORS

Q1～3:	2SA1015-GR

- DIODES

D1, 3, 4, 6, 7:	MA165


② A_1 Key
① E keys
(E_{44}・E_{56})

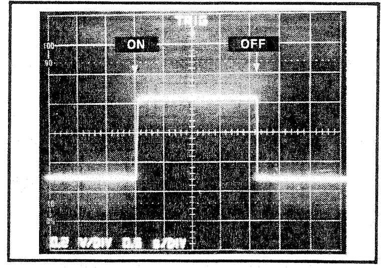
Check Point ❶

Set the initial setting mode (Refer to page Ⅰ-6)

イニシャルセッティングを行ってください。(Ⅰ-3 ページ参照)

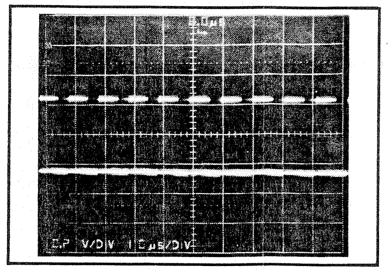
- SOUND .... SPECIAL PERC
- Main Volume .... MAX

❶ $\overline{\text{RESET}}$

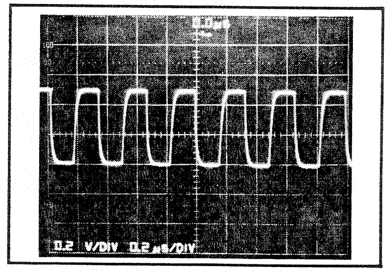


- Power SW........................... ON → OFF

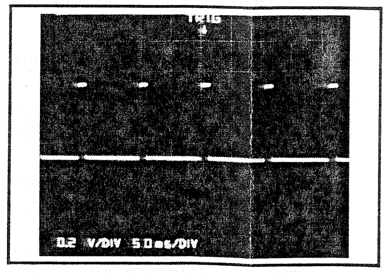
❸



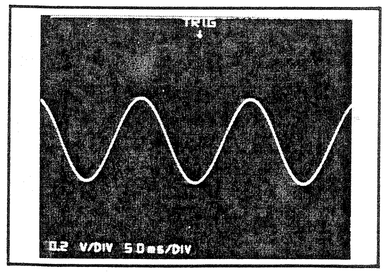
❹



❺, ❻

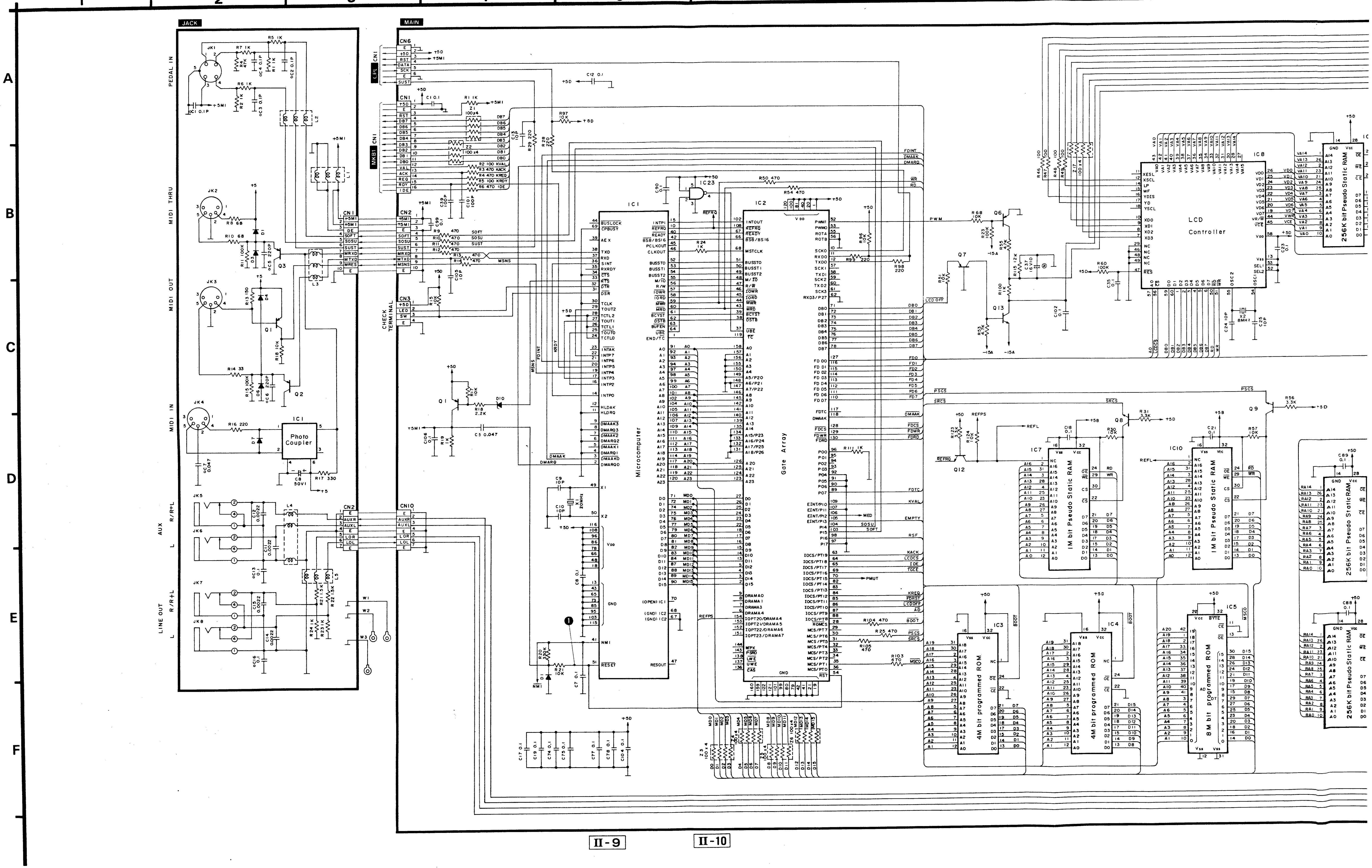


❼, ❽

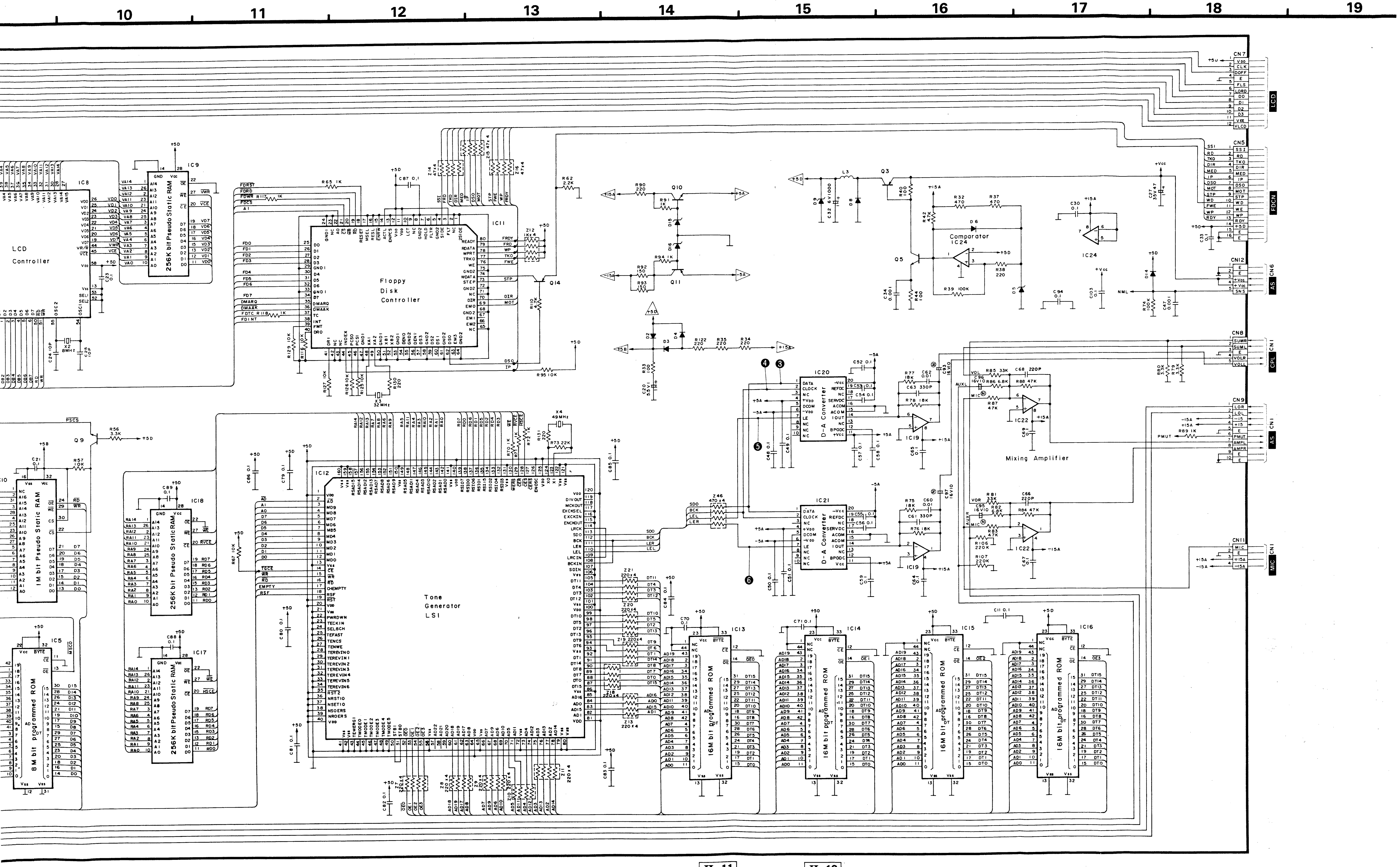


MAIN **JACK**

MAIN AND JACK CIRCUIT DIAGRAM



1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
JACK
MAIN
PEDAL IN
MIDI THRU
MIDI OUT
MIDI IN
AUX
R/R+L
L
LINE OUT
JK1
JK2
JK3
JK4
JK5
JK6
JK7
JK8
IC1
Photo Coupler
CN1
CN2
CN3
CN6
CN10
CPL CN1
MKB1 CN1
CHECK TERMINAL
IC1
Microcomputer
IC2
Gate Array
IC23
IC8
LCD Controller
IC7
1M bit Pseudo Static RAM
IC10
1M bit Pseudo Static RAM
IC3
4M bit programmed ROM
IC4
4M bit programmed ROM
IC5
8 M bit programmed ROM
256K bit Pseudo Static RAM
256K bit Pseudo Static RAM
256K bit Pseudo Static RAM
Q1
Q2
Q3
Q6
Q7
Q8
Q9
Q12
Q13
X1 20MHz
X2 8MHz

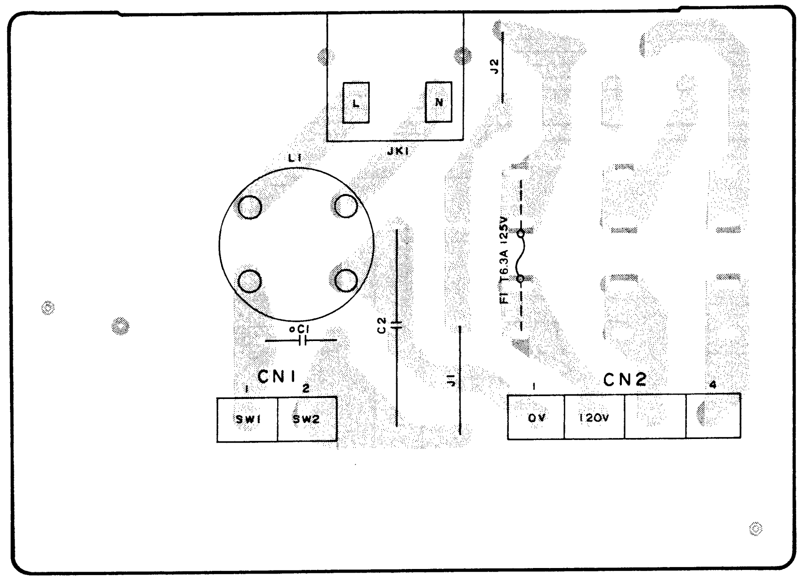

10
11
12
13
14
15
16
17
18
19
LCD Controller
IC8
IC9
256K bit Pseudo Static RAM
Floppy Disk Controller
IC11
X2 8MHz
X3 32MHz
X4 49MHz
Q9
Q10
Q11
Q14
Q3
Q5
L3
Comparator IC24
IC24
1M bit Pseudo Static RAM
IC18
256K bit Pseudo Static RAM
IC17
256K bit Pseudo Static RAM
IC5
8M bit programmed ROM
IC12
Tone Generator LSI
IC20
D-A Converter
IC21
D-A Converter
IC19
IC22
Mixing Amplifier
IC13
16M bit programmed ROM
IC14
16M bit programmed ROM
IC15
16M bit programmed ROM
IC16
16M bit programmed ROM
CN7
LCD
CN5
FDCN
CN12
AS CN6
CN8
CPL CN1
CN9
AS CN1
CN11
MIC CN1
❸
❹
❺
❻

ACP AS HP AC POWER SUPPLY, AMP & POWER SUPPLY AND HEADPHONES CIRCUIT BOARD

1 2 3 4 5 6 7 8 9 10

A B C D E F

ACP [M] [MC] [XM] **SXPG216031**

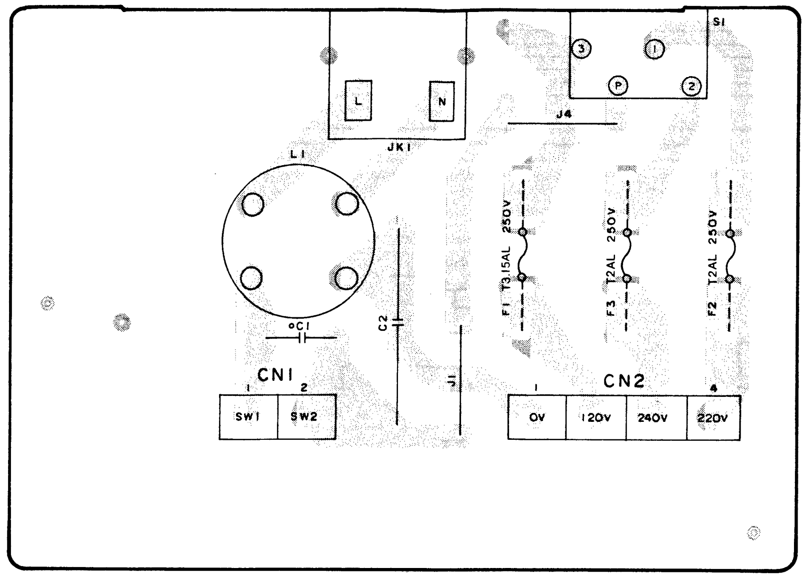


JK1
L
N
J2
L1
F1 T6.3A 125V
C1
C2
J1
CN1
SW1
SW2
CN2
0V
120V

ACP

NOTE:
- FUSE
  F1: XBA1C63NU100

ACP [X] [XR] [XS] [XD] [XT] **SXPG216041**

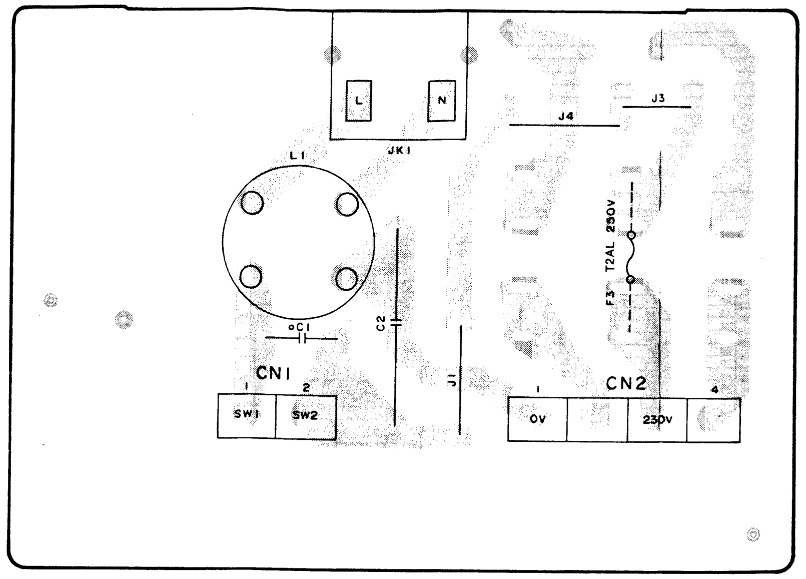


JK1
L
N
S1
J4
L1
F1 T3.15AL 250V
F3 T2AL 250V
F2 T2AL 250V
C1
C2
J1
CN1
SW1
SW2
CN2
0V
120V
240V
220V

ACP

NOTE:
- FUSES
  F1: XBA2C31TBO
  F2, 3: XBA2C20TBO

ACP Others **SXPG216011**



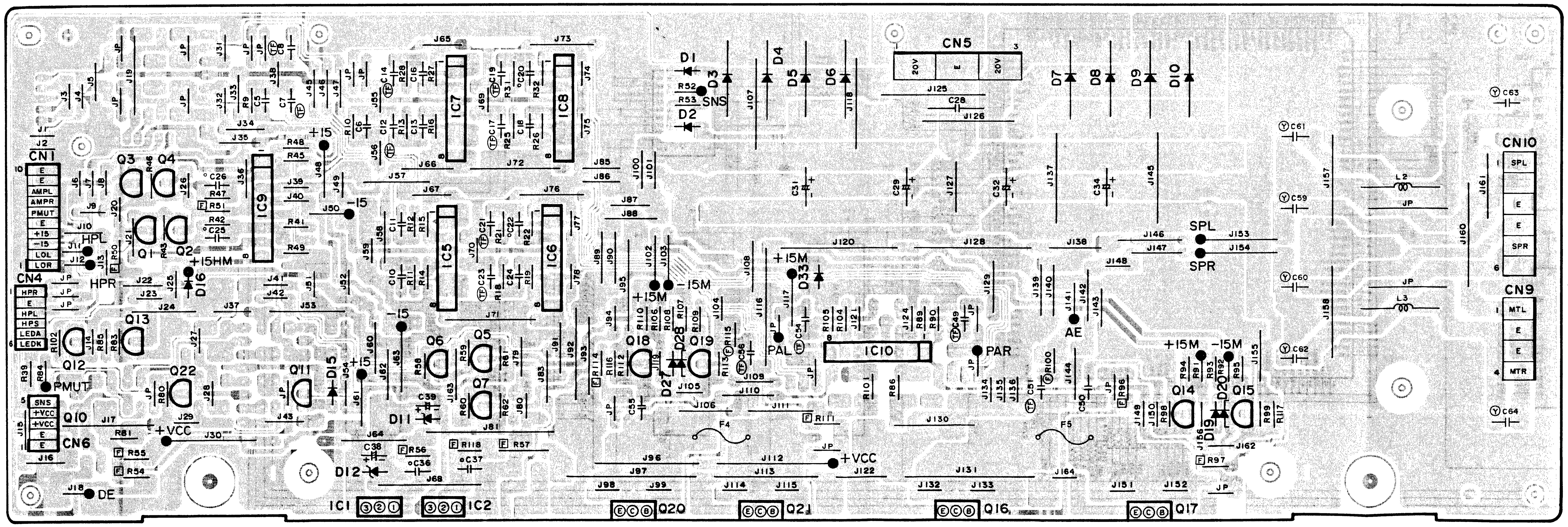
JK1
L
N
J4
J3
L1
F3 T2AL 250V
C1
C2
J1
CN1
SW1
SW2
CN2
0V
230V

ACP

NOTE:
- FUSE
  F3: XBA2C20TBO

AS

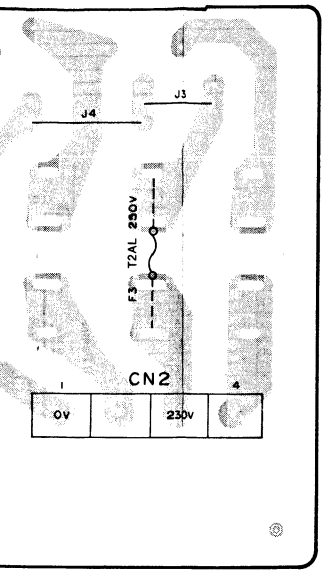
- [M] [MC] [XM] **SXPG217061**
- Others **SXPG217041**



CN1
E
AMPL
AMPR
PMUT
+15
-15
LOL
LOR
CN4
HPR
HPL
HPS
LEDA
LEDK
CN6
SNS
+VCC
IC1
IC2
IC5
IC6
IC7
IC8
IC9
IC10
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
Q22
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D15
D16
D19
D20
D27
D28
D33
CN5
20V
E
20V
CN10
SPL
SPR
CN9
MTL
MTR
L2
L3
F4
F5
+15
-15
+15HM
-15M
+15M
HPL
HPR
PMUT
DE
SNS
PAL
PAR
AE
SPL
SPR
+VCC

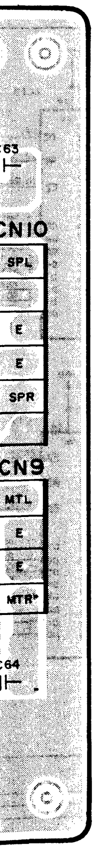
NOTES:
- IC'S
  IC1: M5F78M15L
  IC2: M5F79M15L
  IC5~10: SVIGM5218L
- TRANSISTORS
  Q1, 3: 2SC3940ARS
  Q2, 4: 2SA1534ARS
  Q5, 6, 13, 15, 19, 22: 2SA1015-GR
  Q7, 11, 12, 14, 18: 2SC1815GR
  Q16, 20: 2SB946P
  Q17, 21: 2SD1271P
- DIODES
  D1, 2: SVDGERA15
  D3~10: SVDS3V20
  D11, 12: MA4180
  D15, 19, 20, 27, 28: MA165
  D16, 33: EK04
- FUSES
  F4, 5: XBA2C20TB
  others
  F4, 5: XBA1C25NL
  [M, MC, XM]

SXPG216011


J4
J3
F3 T2AL 250V
CN2
1
4
0V
230V

17061

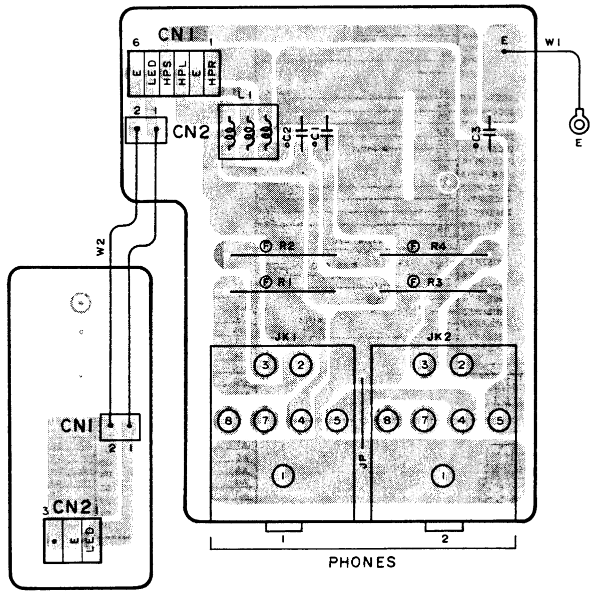
17041


63
CN10
SPL
E
E
SPR
CN9
MTL
E
E
MTR*
64

NOTES:

• IC'S	
IC1:	M5F78M15L
IC2:	M5F79M15L
IC5～10:	SVIGM5218L
• TRANSISTORS	
Q1, 3:	2SC3940ARS
Q2, 4:	2SA1534ARS
Q5, 6, 13, 15, 19, 22:	2SA1015-GR
Q7, 11, 12, 14, 18:	2SC1815GR
Q16, 20:	2SB946P
Q17, 21:	2SD1271P
• DIODES	
D1, 2:	SVDGERA1502
D3～10:	SVDS3V20
D11, 12:	MA4180
D15, 19, 20, 27, 28:	MA165
D16, 33:	EK04
• FUSES	
F4, 5:	XBA2C20TB0
others F4, 5:	XBA1C25NU100 [M, MC, XM]

HP **SXPG210831**


CN1
6
1
E
LED
HPS
HPL
E
HPR
2 1
CN2
L1
C2
C1
C3
E
W1
E
W2
R2
R4
R1
R3
JK1
JK2
3
2
8
7
4
5
1
JP
CN1
2 1
3 CN2 1
E
LED
1
2
PHONES

■ Measuring Condition ■ 波形の測定条件

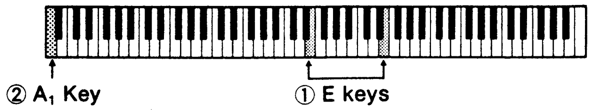
Check Point ❸～❺

Set to the self-diagnostic mode followings.

- While pressing two E keys (①) simultaneously, turn on the power switch.

次のように自己診断モードに設定してください。

- 2 つの E キー (①) を同時に押しながら、電源スイッチをオンする。
- SOUND .... SPECIAL PERC
- Main Volume .... Center
- Keyboard.. A_1 (②)


② A1 Key
① E keys

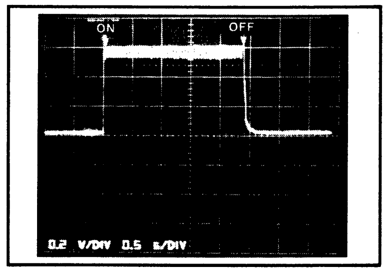
Check Point ❶, ❷

Set the initial setting mode (Refer to page I -6)

チェックポイント ❶、❷

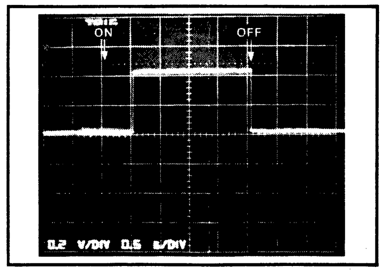
イニシャルセッティングを行ってください。(I -3 ページ参照)

❶ SNS



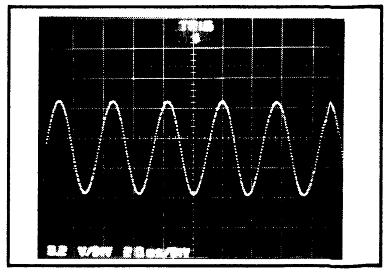
- Power SW.......................... ON → OFF

❷ PMUT

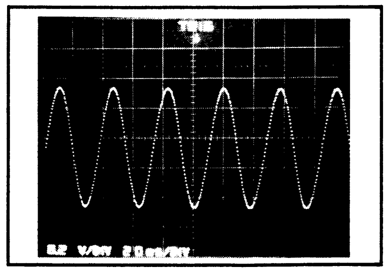


- Power SW.......................... ON → OFF

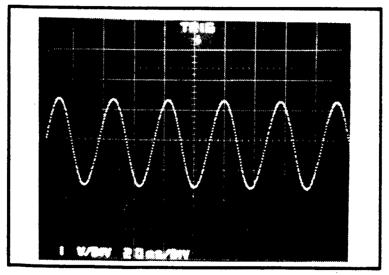
❸ HPL, HPR



❹ PAL, PAR

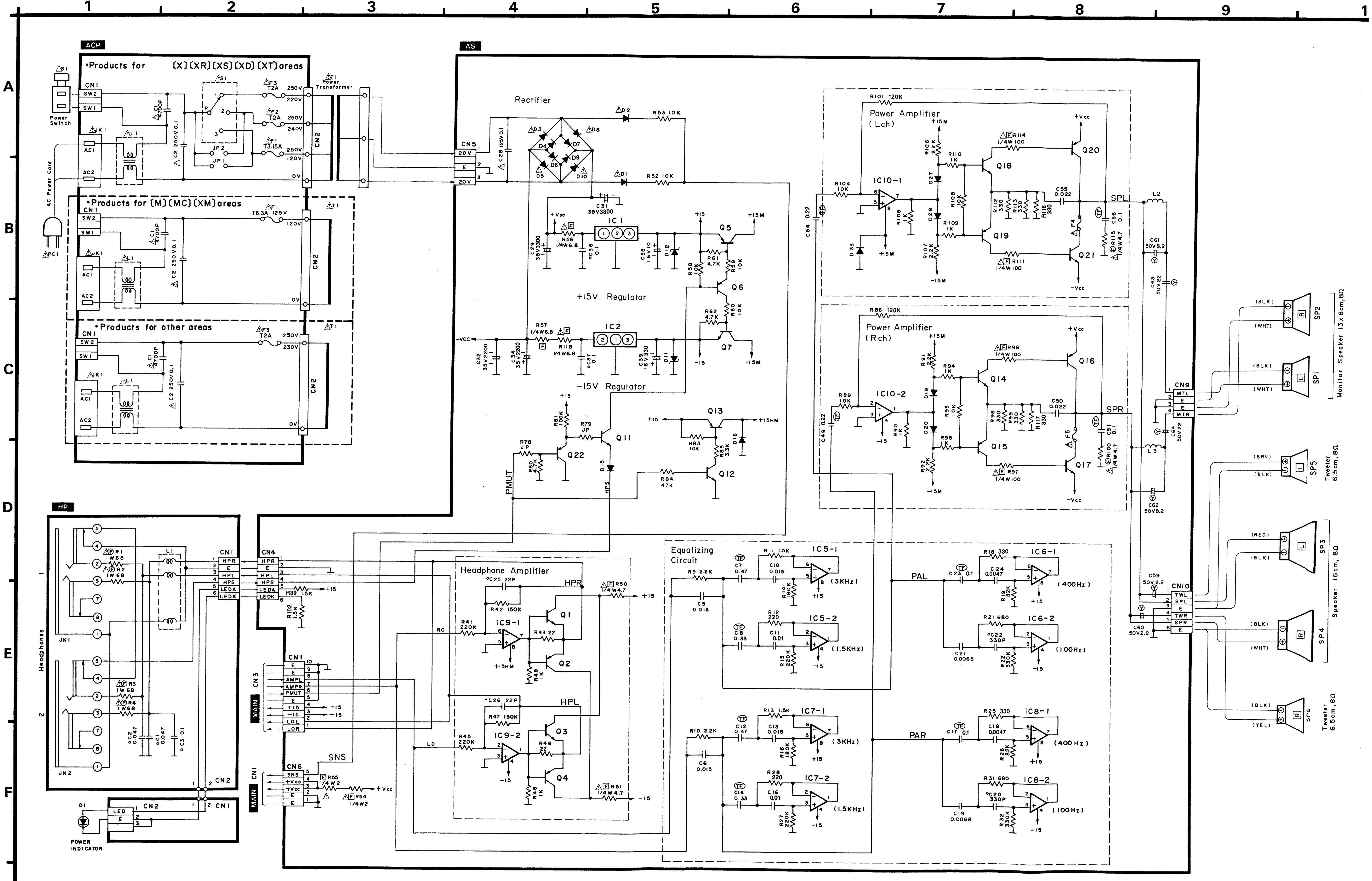


❺ SPL, SPR



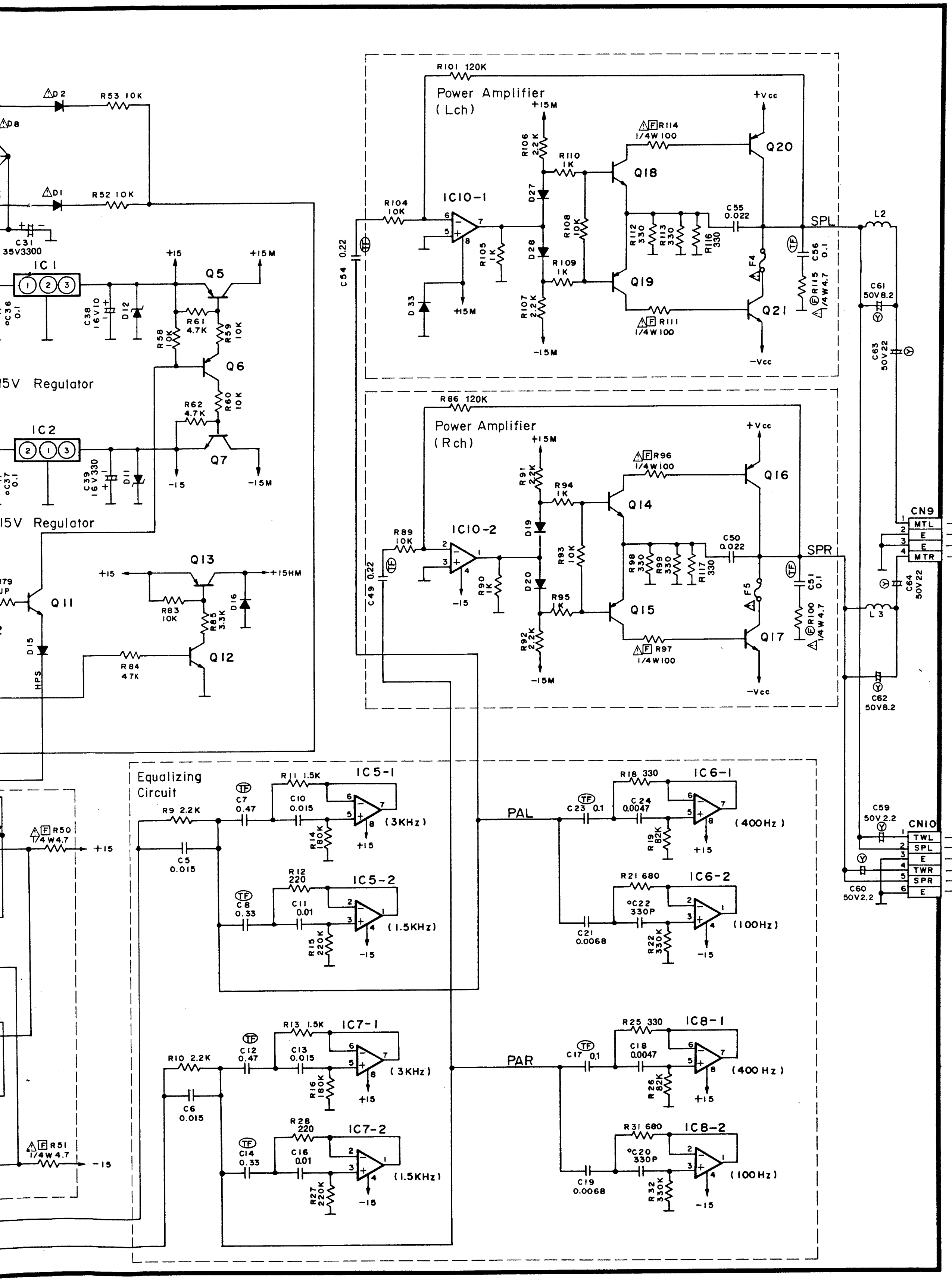
ACP **AS** **HP**

AC POWER SUPPLY, AMP & POWER SUPPLY AND HEADPHONES CIRCUIT DIAGRAM

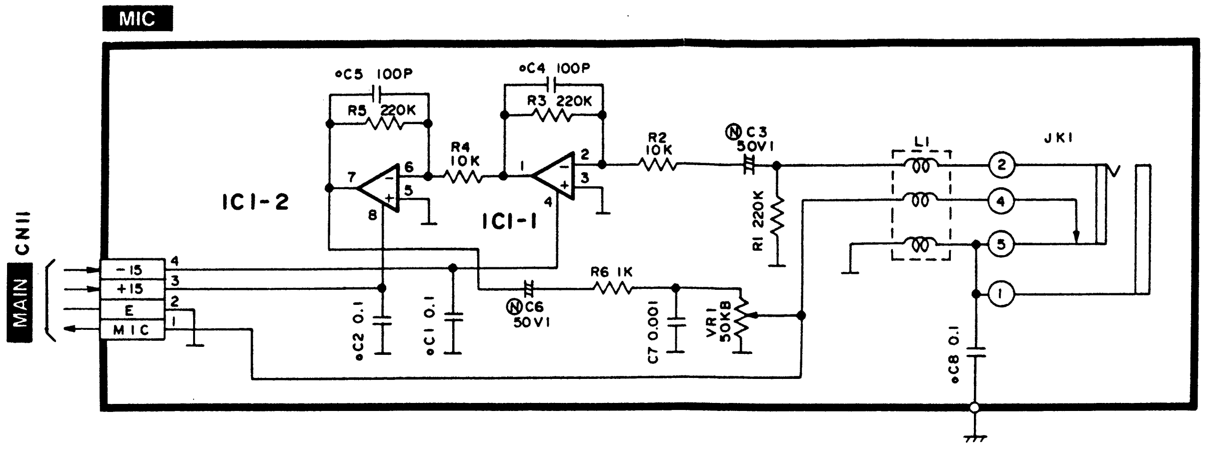

1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
ACP
•Products for (X) (XR) (XS) (XD) (XT) areas
Power Switch
AC Power Cord
T1 Power Transformer
•Products for (M) (MC) (XM) areas
•Products for other areas
CN1
CN2
SW2
SW1
AC1
AC2
JK1
L1
PC1
F3 T2A
F2 T2A
F1 T3.15A
F1 T6.3A 125V
250V
220V
240V
120V
230V
0V
JP1
JP2
C1 4700P
C2 250V0.1
AS
Rectifier
CN5
20V
E
D2
D1
D3
D4
D5
D6
D7
D8
D9
D10
R53 10K
R52 10K
C28 125V0.1
C31 35V3300
C29 35V3300
IC1
IC2
+15V Regulator
-15V Regulator
Q5
Q6
Q7
Q11
Q12
Q13
Q22
R56 1/4W6.8
R57 1/4W6.8
R118 1/4W6.8
C32 35V2200
C34 35V2200
C36 0.1
C37 0.1
C38 16V10
C39 16V330
D11
D12
D15
D16
R58 10K
R59 10K
R60 10K
R61 4.7K
R62 4.7K
R78 JP
R79 JP
R80 4.7K
R81 100K
R83 10K
R84 47K
R85 3.3K
PMUT
HPS
-VCC
+Vcc
+15
-15
+15M
-15M
+15HM
Power Amplifier (Lch)
Power Amplifier (Rch)
IC10-1
IC10-2
R101 120K
R86 120K
R104 10K
R89 10K
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
R114 1/4W100
R111 1/4W100
R96 1/4W100
R97 1/4W100
R115 1/4W4.7
R100 1/4W4.7
C55 0.022
C50 0.022
C56 0.1
C51 0.1
C54 0.22
C49 0.22
F4
F5
SPL
SPR
L2
L3
C61 50V8.2
C62 50V8.2
C63 50V22
C64 50V22
C59 50V2.2
C60 50V2.2
CN9
MTL
MTR
CN10
TWL
SPL
TWR
SPR
(BLK)
(WHT)
(BRN)
(RED)
(YEL)
SP1
SP2
SP3
SP4
SP5
SP6
L
R
Monitor Speaker 13x6cm, 8Ω
Tweeter 6.5cm, 8Ω
Speaker 16cm, 8Ω
Equalizing Circuit
IC5-1
IC5-2
IC6-1
IC6-2
IC7-1
IC7-2
IC8-1
IC8-2
(3KHz)
(1.5KHz)
(400Hz)
(100Hz)
PAL
PAR
R9 2.2K
R10 2.2K
C5 0.015
C6 0.015
Headphone Amplifier
IC9-1
IC9-2
Q1
Q2
Q3
Q4
HPR
HPL
R41 220K
R45 220K
R42 150K
R47 150K
C25 22P
C26 22P
R43 22
R46 22
R49 1K
R48 1K
R50 1/4W4.7
R51 1/4W4.7
RO
LO
CN4
HPR
E
HPL
HPS
LEDA
LEDK
R39 1.5K
R102 1.5K
CN1
CN3
MAIN
AMPL
AMPR
PMUT
LOL
LOR
CN6
SNS
+Vcc
R55 1/4W2
R54 1/4W2
HP
Headphones
JK1
JK2
R1 1W68
R2 1W68
R3 1W68
R4 1W68
C2 0.047
C1 0.047
C3 0.1
LED
POWER INDICATOR
D1

& POWER SUPPLY AND HEADPHONES CIRCUIT DIAGRAM

MIC MICROPHONE CIRCUIT



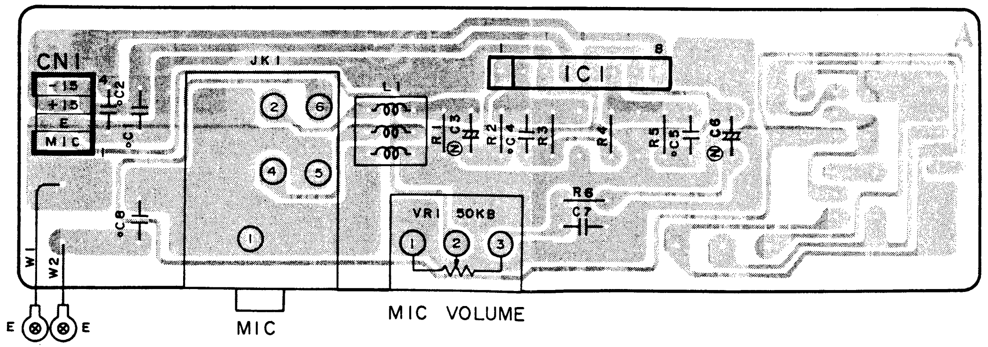
Power Amplifier
(Lch)
Power Amplifier
(Rch)
IC10-1
IC10-2
Q18
Q19
Q20
Q21
Q14
Q15
Q16
Q17
R101 120K
R86 120K
R104 10K
R89 10K
R114 1/4W 100
R111 1/4W 100
R96 1/4W 100
R97 1/4W 100
R115 1/4W 4.7
R100 1/4W 4.7
C55 0.022
C50 0.022
C54 0.22
C49 0.22
SPL
SPR
L2
L3
C61 50V8.2
C62 50V8.2
C63 50V22
C64 50V22
C59 50V2.2
C60 50V2.2
+Vcc
-Vcc
+15M
-15M
CN9
MTL
E
E
MTR
CN10
TWL
SPL
E
TWR
SPR
E
(BLK)
(WHT)
(BRN)
(RED)
(YEL)
SP1
SP2
SP3
SP4
SP5
SP6
Monitor Speaker 13x6cm, 8Ω
Tweeter 6.5cm, 8Ω
Speaker 16cm, 8Ω
IC1
IC2
Q5
Q6
Q7
Q11
Q12
Q13
15V Regulator
15V Regulator
C31 35V3300
R52 10K
R53 10K
D1
D2
+15
+15M
-15
-15M
+15HM
Equalizing Circuit
IC5-1
IC5-2
IC6-1
IC6-2
IC7-1
IC7-2
IC8-1
IC8-2
(3KHz)
(1.5KHz)
(400Hz)
(100Hz)
PAL
PAR
R9 2.2K
R10 2.2K
R50 1/4W 4.7
R51 1/4W 4.7



MIC
MAIN
CN11
-15
+15
E
MIC
IC1-2
IC1-1
C5 100P
C4 100P
R5 220K
R3 220K
R4 10K
R2 10K
C3 50V1
R1 220K
C2 0.1
C1 0.1
C6 50V1
R6 1K
C7 0.001
VR1 50KB
L1
C8 0.1
JK1

MIC

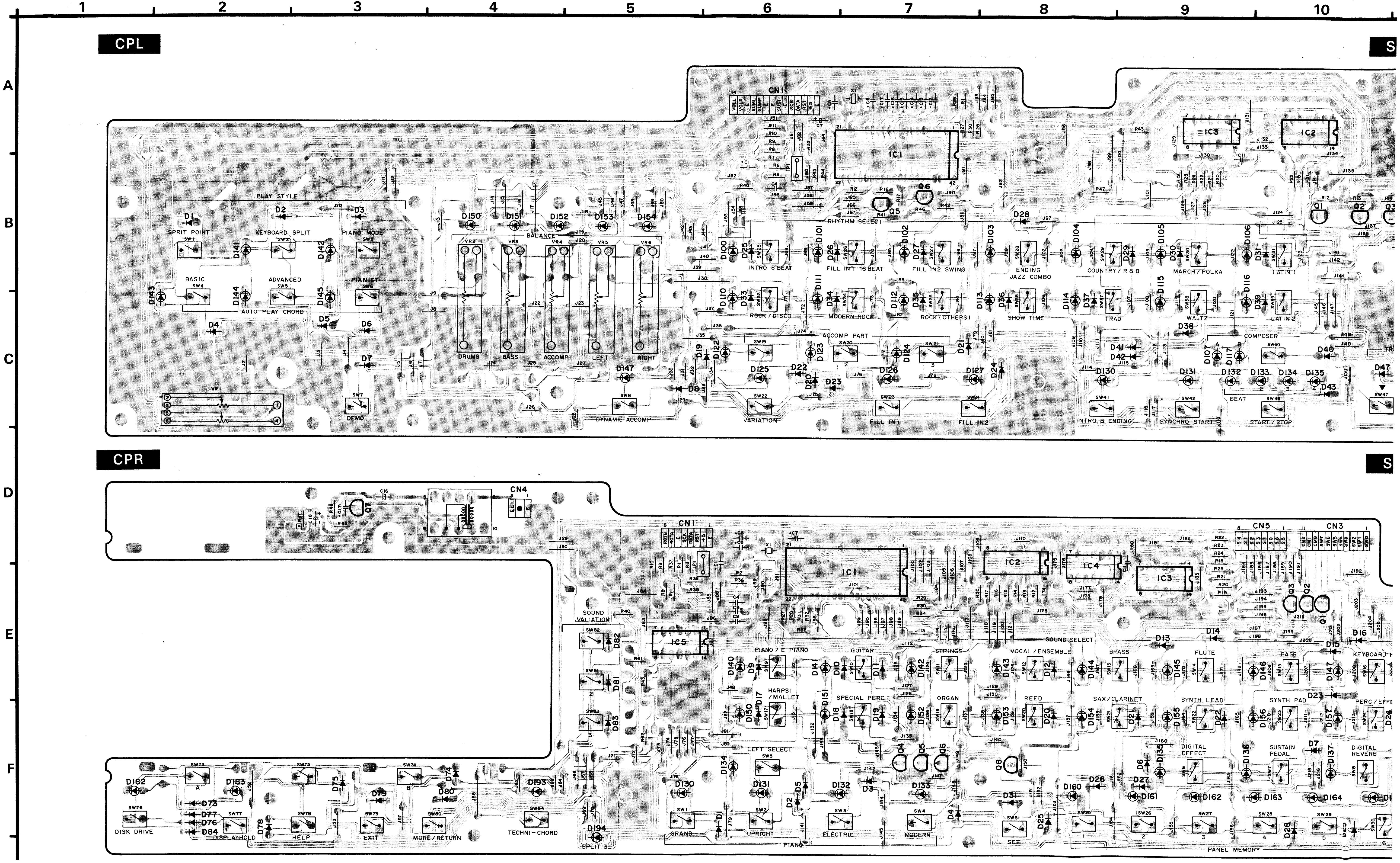
SXPG142231



CN1
-15
+15
E
MIC
JK1
L1
IC1
VR1 50KB
R6
C7
W1
W2
E
E
MIC
MIC VOLUME

NOTE:
- IC
  IC1: SVIGM5218L

CPL CPR CONTROL PANEL LEFT AND RIGHT CIRCUIT BOARD

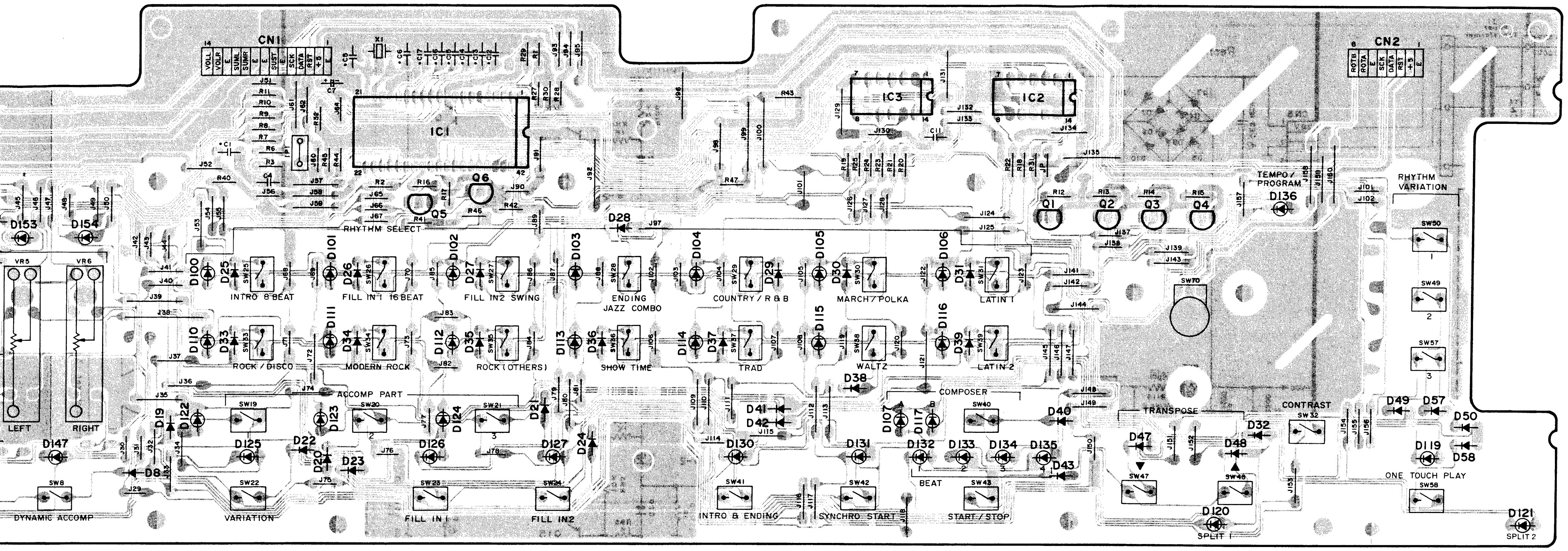


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
CPL
PLAY STYLE
SPRIT POINT
KEYBOARD SPLIT
PIANO MODE
BASIC
ADVANCED
PIANIST
AUTO PLAY CHORD
BALANCE
DRUMS
BASS
ACCOMP
LEFT
RIGHT
DEMO
DYNAMIC ACCOMP
VARIATION
CN1
IC1
IC2
IC3
RHYTHM SELECT
INTRO 8 BEAT
FILL IN1 16 BEAT
FILL IN2 SWING
ENDING JAZZ COMBO
COUNTRY / R & B
MARCH / POLKA
LATIN 1
ROCK / DISCO
MODERN ROCK
ROCK (OTHERS)
SHOW TIME
TRAD
WALTZ
LATIN 2
ACCOMP PART
COMPOSER
BEAT
FILL IN1
FILL IN2
INTRO & ENDING
SYNCHRO START
START / STOP
CPR
CN4
CN1
CN5
CN3
IC1
IC2
IC3
IC4
IC5
SOUND VALIATION
SOUND SELECT
PIANO / E PIANO
GUITAR
STRINGS
VOCAL / ENSEMBLE
BRASS
FLUTE
BASS
KEYBOARD
HARPSI / MALLET
SPECIAL PERC
ORGAN
REED
SAX / CLARINET
SYNTH LEAD
SYNTH PAD
PERC / EFFE
LEFT SELECT
DIGITAL EFFECT
SUSTAIN PEDAL
DIGITAL REVERB
DISK DRIVE
DISPLAYHOLD
HELP
EXIT
MORE / RETURN
TECHNI-CHORD
SPLIT 3
GRAND
UPRIGHT
PIANO
ELECTRIC
MODERN
SET
PANEL MEMORY

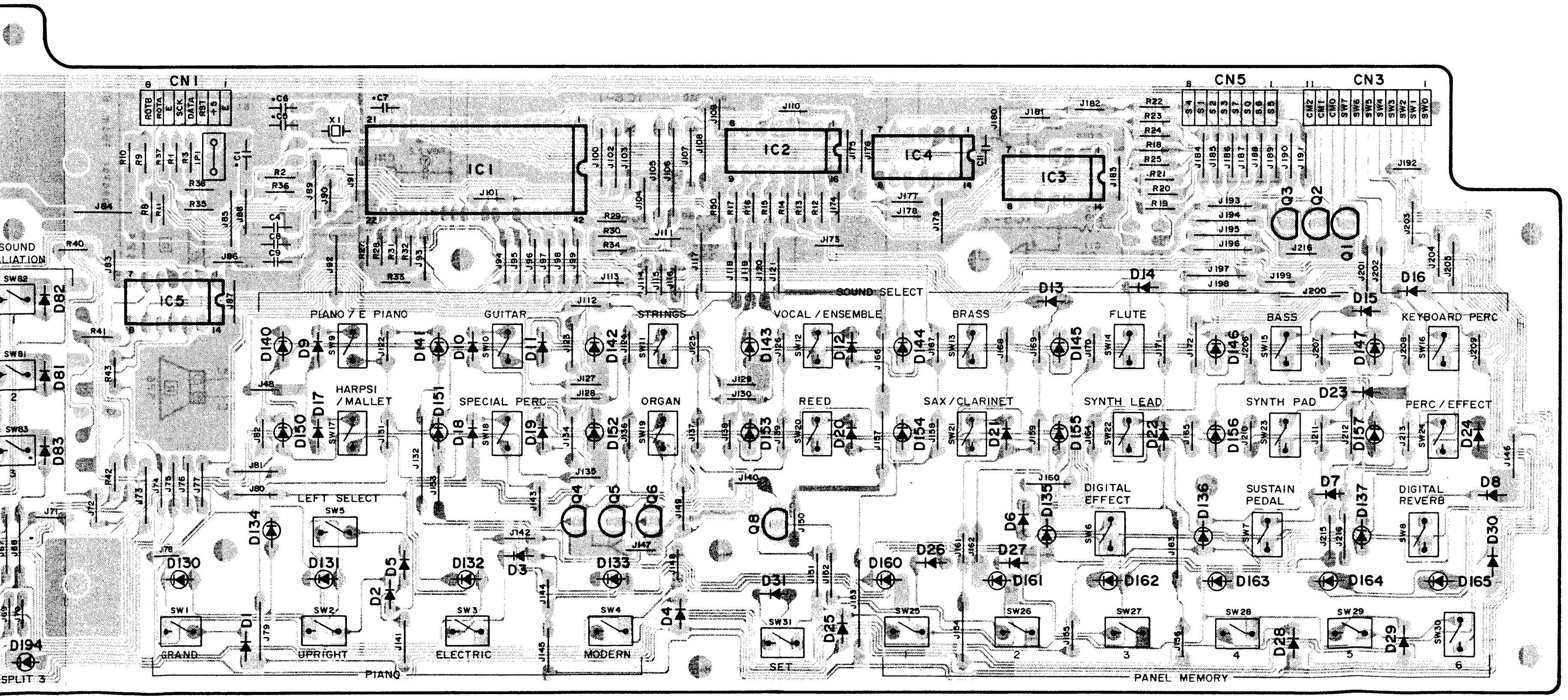
T CIRCUIT BOARD

5 6 7 8 9 10 11 12 13 14

SXPG217411A


CN1
CN2
IC1
IC2
IC3
Q1
Q2
Q3
Q4
Q5
Q6
X1
RHYTHM SELECT
INTRO 8 BEAT
FILL IN 1 16 BEAT
FILL IN2 SWING
ENDING JAZZ COMBO
COUNTRY / R & B
MARCH / POLKA
LATIN 1
ROCK / DISCO
MODERN ROCK
ROCK (OTHERS)
SHOW TIME
TRAD
WALTZ
LATIN 2
ACCOMP PART
COMPOSER
TRANSPOSE
CONTRAST
TEMPO / PROGRAM
RHYTHM VARIATION
ONE TOUCH PLAY
LEFT
RIGHT
VR5
VR6
DYNAMIC ACCOMP
VARIATION
FILL IN 1
FILL IN2
INTRO & ENDING
SYNCHRO START
BEAT
START / STOP
SPLIT 1
SPLIT 2

SXPG217411B


CN1
CN3
CN5
IC1
IC2
IC3
IC4
IC5
X1
Q1
Q2
Q3
Q4
Q5
Q6
Q8
SOUND VARIATION
SOUND SELECT
PIANO / E PIANO
GUITAR
STRINGS
VOCAL / ENSEMBLE
BRASS
FLUTE
BASS
KEYBOARD PERC
HARPSI / MALLET
SPECIAL PERC
ORGAN
REED
SAX / CLARINET
SYNTH LEAD
SYNTH PAD
PERC / EFFECT
DIGITAL EFFECT
SUSTAIN PEDAL
DIGITAL REVERB
LEFT SELECT
GRAND
UPRIGHT
ELECTRIC
MODERN
PIANO
SET
PANEL MEMORY
SPLIT 3

CPL

NOTES:

- IC'S

IC1:	M37471M2142S
IC2, 3:	HD74LS07P

- TRANSISTORS

Q1:	2SA1015-GR
Q2~6:	2SA830SB

- DIODES

D1~8, 19~43, 47~50, 57, 58:	MA165
D100~106, 110~116, 120~127, 130~132, 136, 141~145, 147, 150~154:	SEL4117RM
D107, 117, 119, 133~135:	SEL4417G

- IC PROTECATOR

IP1:	ICP-N10T104

CPR

NOTES:

- IC'S

IC1:	M37471M2196S
IC2:	HD74LS138P
IC3~5:	HD74LS07P

- TRANSISTORS

Q1~5:	2SA830SB
Q6, 8:	2SA1015-GR
Q7:	2SC3940ARS

- DIODES

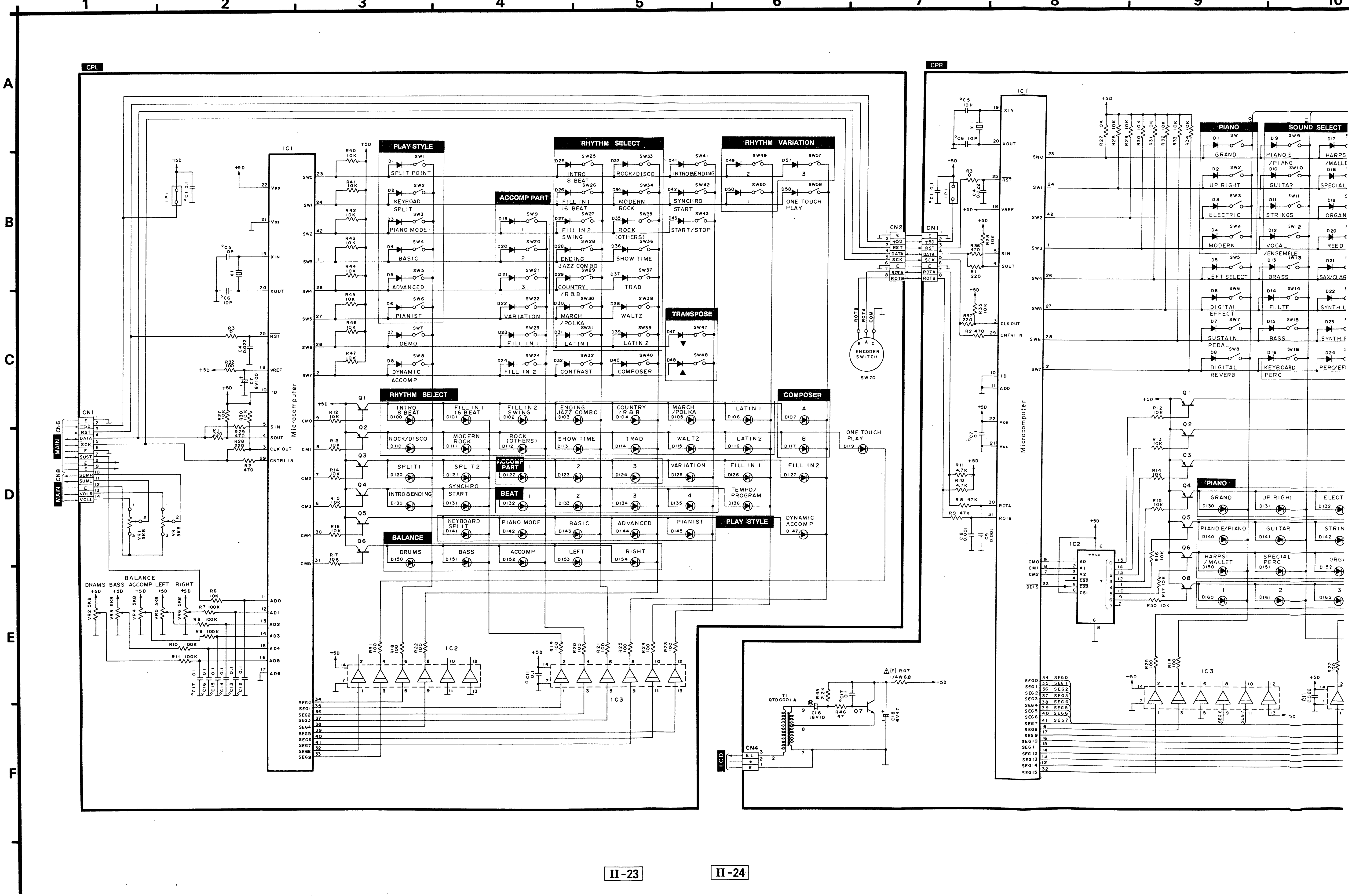
D1~31, 73~84:	MA165
D130~137, 140~147, 150~157, 183, 193, 194:	SEL4117RM
D160~165, 182:	SEL4417G

- IC PROTECTOR

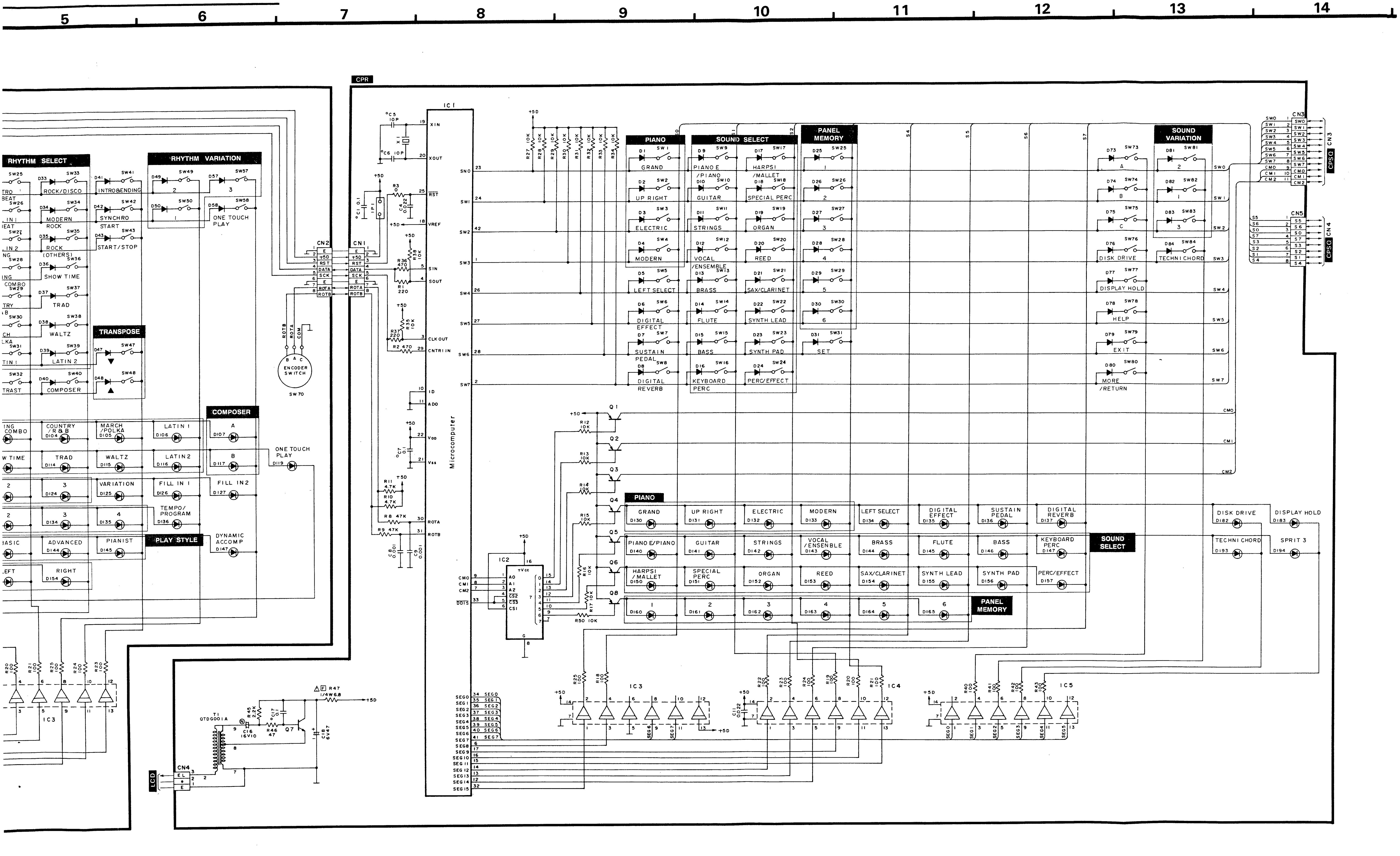
IP1:	ICP-N10T104

CPL **CPR**

CONTROL PANEL LEFT AND RIGHT CIRCUIT DIAGARAM

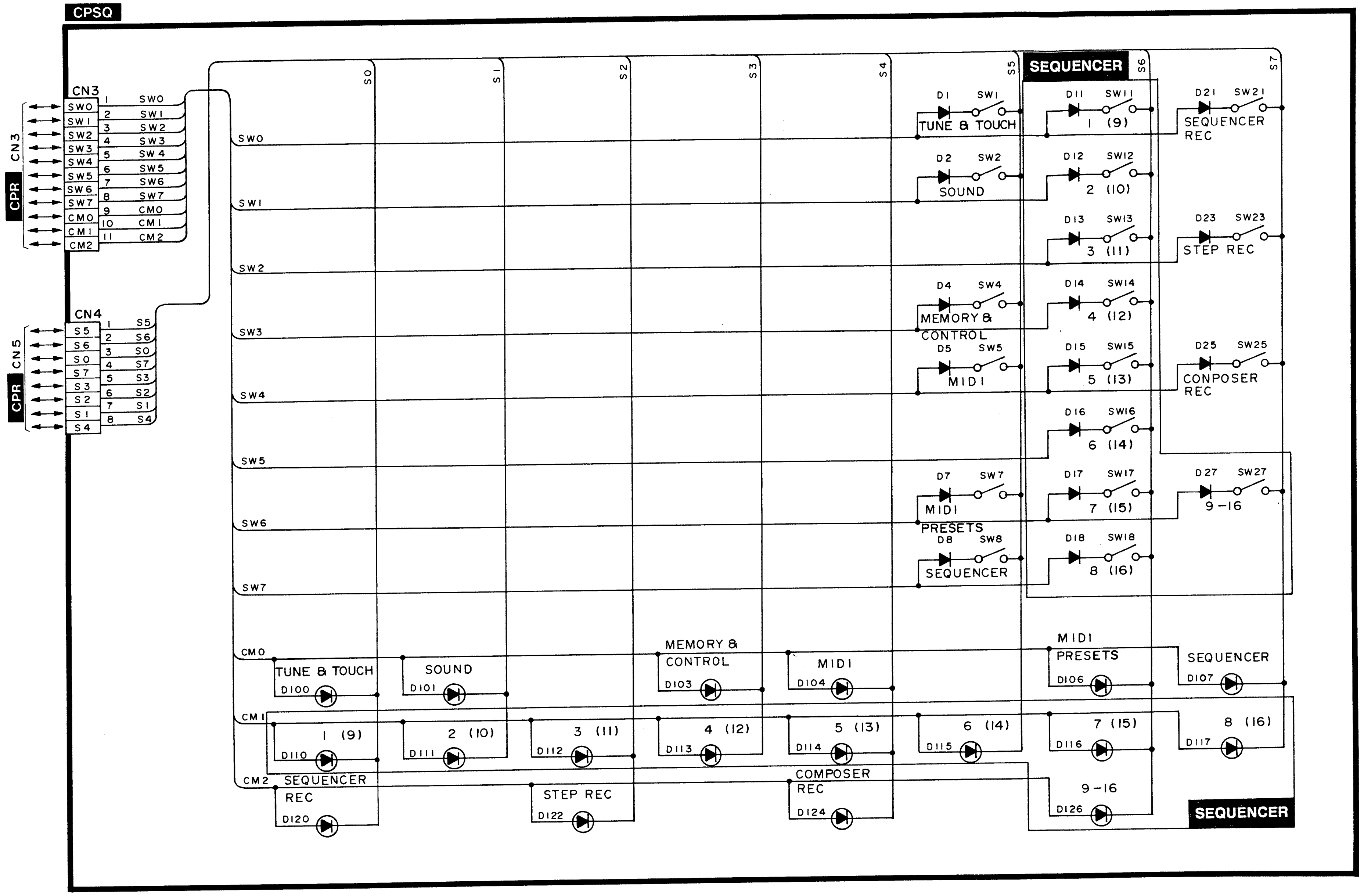

1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
CPL
CPR
IC1
Microcomputer
IC2
IC3
PLAY STYLE
ACCOMP PART
RHYTHM SELECT
RHYTHM VARIATION
TRANSPOSE
COMPOSER
BALANCE
BEAT
PIANO
SOUND SELECT
SPLIT POINT
KEYBOARD SPLIT
PIANO MODE
BASIC
ADVANCED
PIANIST
DEMO
DYNAMIC ACCOMP
VARIATION
FILL IN 1
FILL IN 2
INTRO 8 BEAT
FILL IN 1 16 BEAT
FILL IN 2 SWING
ENDING JAZZ COMBO
COUNTRY /R&B
MARCH /POLKA
LATIN 1
LATIN 2
ROCK/DISCO
MODERN ROCK
ROCK (OTHERS)
SHOW TIME
TRAD
WALTZ
CONTRAST
COMPOSER
INTRO/ENDING
SYNCHRO START
START/STOP
ONE TOUCH PLAY
TEMPO/ PROGRAM
DRUMS
BASS
ACCOMP
LEFT
RIGHT
ENCODER SWITCH
SW70
MAIN CN6
MAIN CN8
CN1
CN2
CN4
LCD
VR1 5KB
BALANCE
DRAMS BASS ACCOMP LEFT RIGHT
GRAND
UP RIGHT
ELECTRIC
MODERN
LEFT SELECT
DIGITAL EFFECT
SUSTAIN PEDAL
DIGITAL REVERB
PIANO E /PIANO
GUITAR
STRINGS
VOCAL /ENSEMBLE
BRASS
FLUTE
BASS
KEYBOARD PERC
HARPSI /MALLET
SPECIAL PERC
ORGAN
REED
SAX/CLAR
SYNTH L
PERC/EF
T1 QTDG001A
Q7
R47 1/4W6.8
+5D
XIN
XOUT
RST
VREF
SIN
SOUT
CLK OUT
CNTRI IN
ROTA
ROTB

HT CIRCUIT DIAGARAM

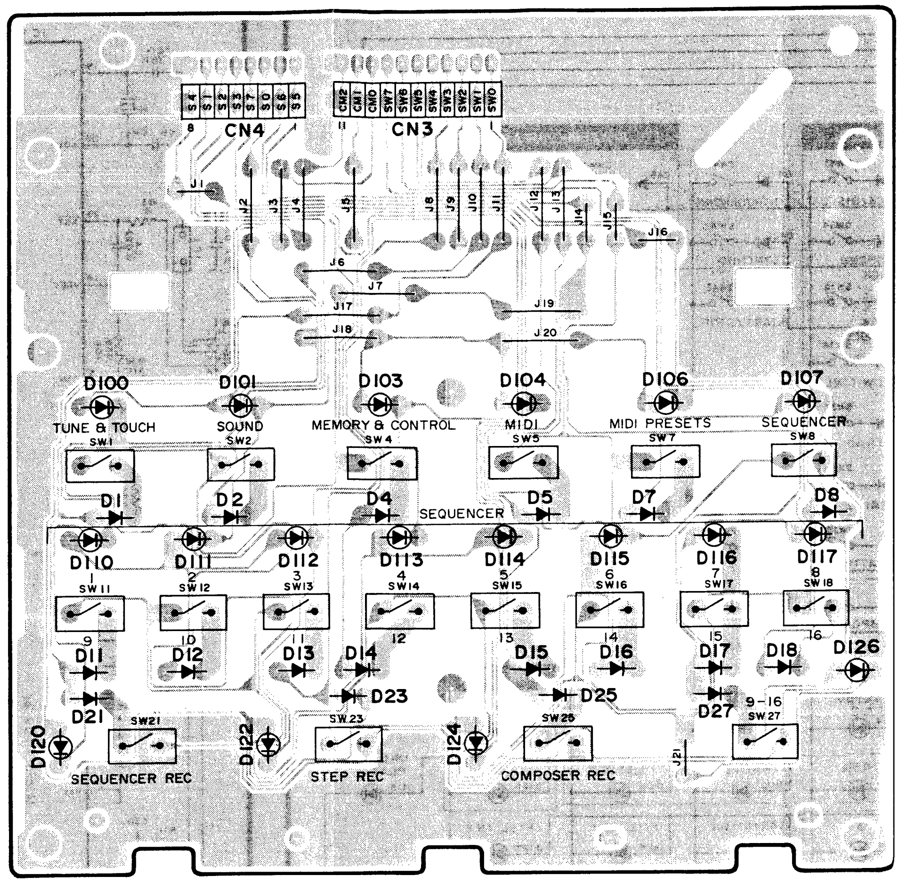

5
6
7
8
9
10
11
12
13
14
CPR
IC1
Microcomputer
XIN
XOUT
RST
VREF
SIN
SOUT
CLK OUT
CNTR1 IN
ROTA
ROTB
Vdd
Vss
ADD
SN0
SW1
SW2
SW3
SW4
SW5
SW6
SW7
CN1
CN2
+5D
RST
DATA
SCK
E
ROTA
ROTB
ENCODER SWITCH
SW70
RHYTHM SELECT
RHYTHM VARIATION
TRANSPOSE
COMPOSER
PLAY STYLE
ROCK/DISCO
INTRO&ENDING
MODERN ROCK
SYNCHRO START
ROCK (OTHERS)
START/STOP
SHOW TIME
TRAD
WALTZ
LATIN 2
COMPOSER
ONE TOUCH PLAY
COUNTRY /R&B
MARCH /POLKA
LATIN 1
LATIN 2
A
B
VARIATION
FILL IN 1
FILL IN 2
TEMPO/ PROGRAM
ADVANCED
PIANIST
DYNAMIC ACCOMP
RIGHT
PIANO
SOUND SELECT
PANEL MEMORY
SOUND VARIATION
GRAND
UP RIGHT
ELECTRIC
MODERN
LEFT SELECT
DIGITAL EFFECT
SUSTAIN PEDAL
DIGITAL REVERB
PIANO E /PIANO
GUITAR
STRINGS
VOCAL /ENSEMBLE
BRASS
FLUTE
BASS
KEYBOARD PERC
HARPSI /MALLET
SPECIAL PERC
ORGAN
REED
SAX/CLARINET
SYNTH LEAD
SYNTH PAD
PERC/EFFECT
SET
DISK DRIVE
DISPLAY HOLD
HELP
EXIT
MORE /RETURN
TECHNI CHORD
SPRIT 3
IC2
IC3
IC4
IC5
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
CM0
CM1
CM2
DDIS
CN3
CN4
CN5
CPSO
LCD
T1
QTDG001A
SEG0
SEG1
SEG2
SEG3
SEG4
SEG5
SEG6
SEG7
SEG8
SEG9
SEG10
SEG11
SEG12
SEG13
SEG14
SEG15
R47 1/4W6.8

SEQUENCER CONTROL, FD CONNECTOR AND PEDAL CIRCUIT

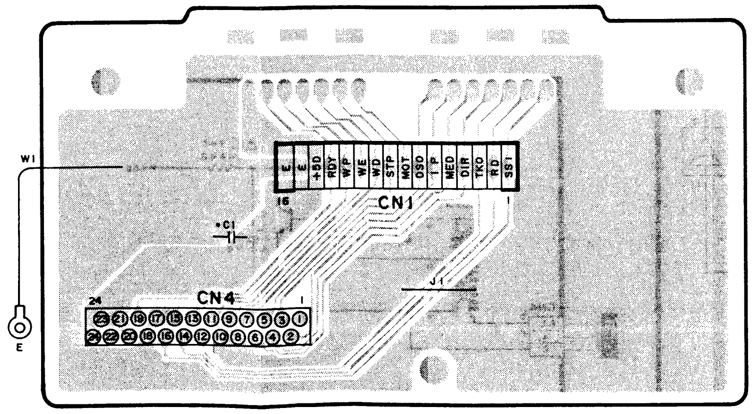
CPSQ


CPSQ
CN3
CPR CN3
SW0
SW1
SW2
SW3
SW4
SW5
SW6
SW7
CM0
CM1
CM2
CN4
CPR CN5
S5
S6
S0
S7
S3
S2
S1
S4
SEQUENCER
D1 SW1 TUNE & TOUCH
D2 SW2 SOUND
D4 SW4 MEMORY & CONTROL
D5 SW5 MIDI
D7 SW7 MIDI PRESETS
D8 SW8 SEQUENCER
D11 SW11 1 (9)
D12 SW12 2 (10)
D13 SW13 3 (11)
D14 SW14 4 (12)
D15 SW15 5 (13)
D16 SW16 6 (14)
D17 SW17 7 (15)
D18 SW18 8 (16)
D21 SW21 SEQUENCER REC
D23 SW23 STEP REC
D25 SW25 CONPOSER REC
D27 SW27 9-16
TUNE & TOUCH D100
SOUND D101
MEMORY & CONTROL D103
MIDI D104
MIDI PRESETS D106
SEQUENCER D107
1 (9) D110
2 (10) D111
3 (11) D112
4 (12) D113
5 (13) D114
6 (14) D115
7 (15) D116
8 (16) D117
SEQUENCER REC D120
STEP REC D122
COMPOSER REC D124
9-16 D126
SEQUENCER

CPSQ **SXPG217511**


CN4
CN3
J1
J2
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
J18
J19
J20
J21
D100 TUNE & TOUCH SW1
D101 SOUND SW2
D103 MEMORY & CONTROL SW4
D104 MIDI SW5
D106 MIDI PRESETS SW7
D107 SEQUENCER SW8
D1
D2
D4
D5
D7
D8
SEQUENCER
D110 1 SW11
D111 2 SW12
D112 3 SW13
D113 4 SW14
D114 5 SW15
D115 6 SW16
D116 7 SW17
D117 8 SW18
D11
D12
D13
D14
D15
D16
D17
D18
D126
D21
D23
D25
D27
9-16
D120 SW21 SEQUENCER REC
D122 SW23 STEP REC
D124 SW25 COMPOSER REC
SW27

FDCN **SXPG217711**


W1
E
+5D
RDY
WP
WE
WD
STP
MOT
DSD
TP
MED
DIR
TXO
RD
SS1
16
CN1
1
C1
J1
CN4
24

CPSQ

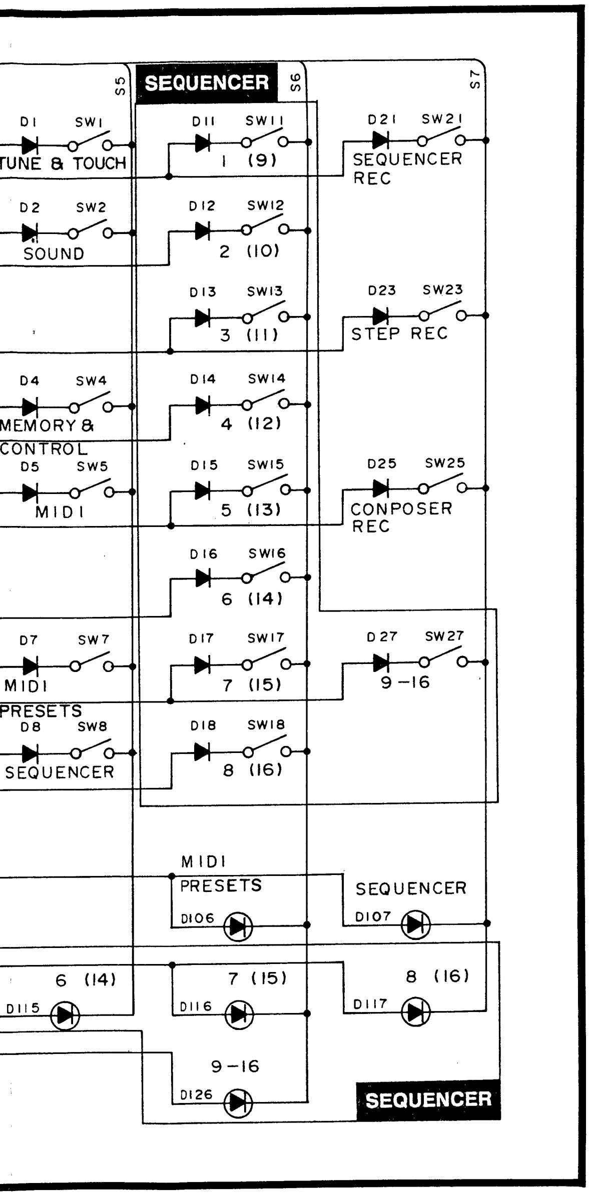
NOTES:

- DIODES

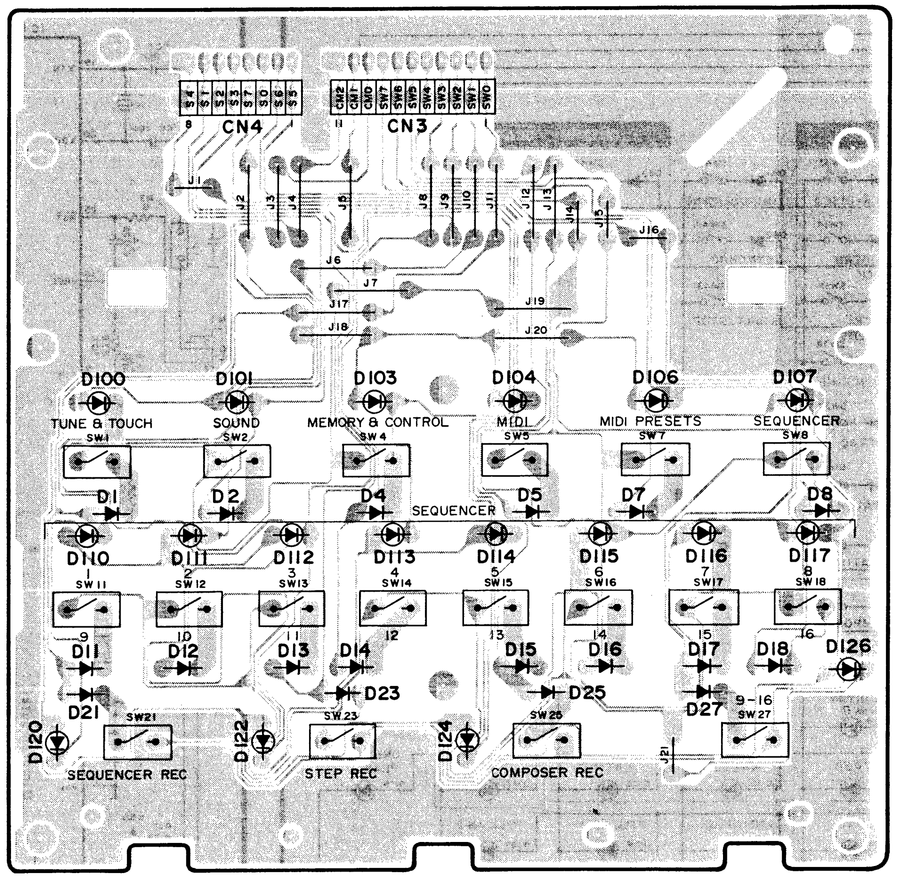
D1, 2, 4, 5, 7, 8, 11~18, 21, 23, 25, 27: MA165

D100, 101, 103, 104, 106, 107, 110~117, 120, 122, 124, 126: SEL4417G

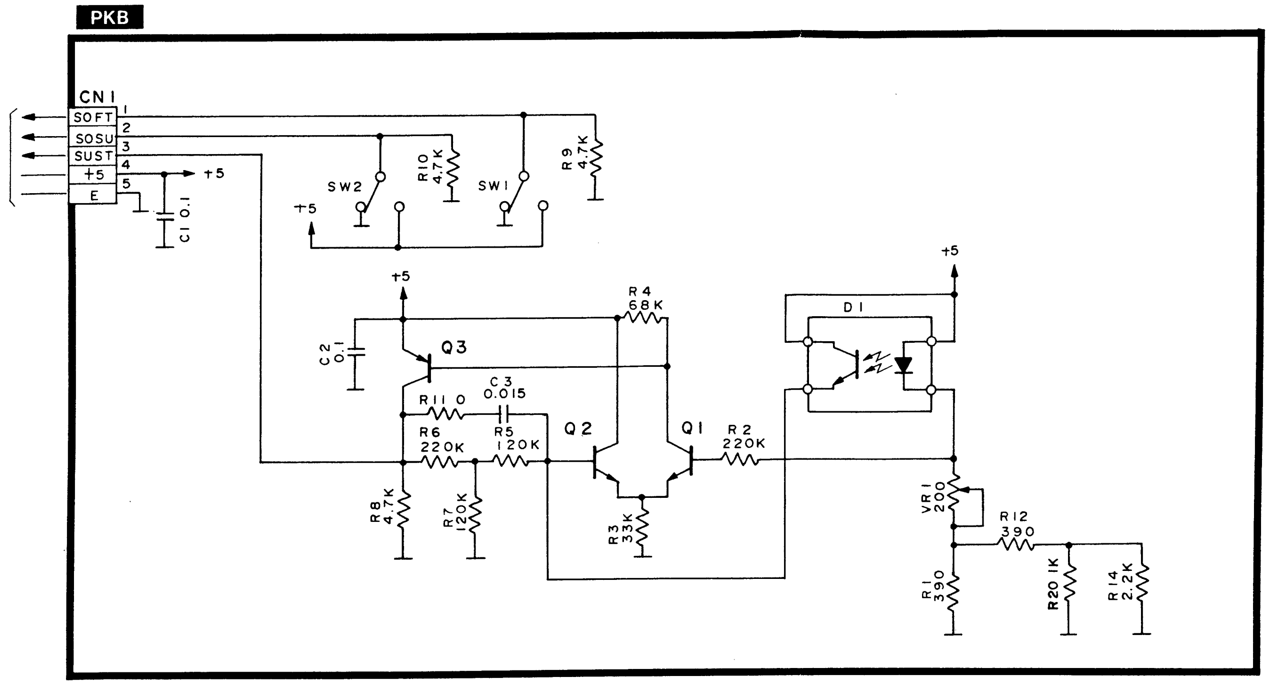
FD CONNECTOR AND PEDAL CIRCUIT


SEQUENCER
S5
S6
S7
D1 SW1
TUNE & TOUCH
D2 SW2
SOUND
D4 SW4
MEMORY & CONTROL
D5 SW5
MIDI
D7 SW7
MIDI PRESETS
D8 SW8
SEQUENCER
D11 SW11
1 (9)
D12 SW12
2 (10)
D13 SW13
3 (11)
D14 SW14
4 (12)
D15 SW15
5 (13)
D16 SW16
6 (14)
D17 SW17
7 (15)
D18 SW18
8 (16)
D21 SW21
SEQUENCER REC
D23 SW23
STEP REC
D25 SW25
CONPOSER REC
D27 SW27
9-16
MIDI PRESETS
D106
SEQUENCER
D107
6 (14)
D115
7 (15)
D116
8 (16)
D117
9-16
D126
SEQUENCER

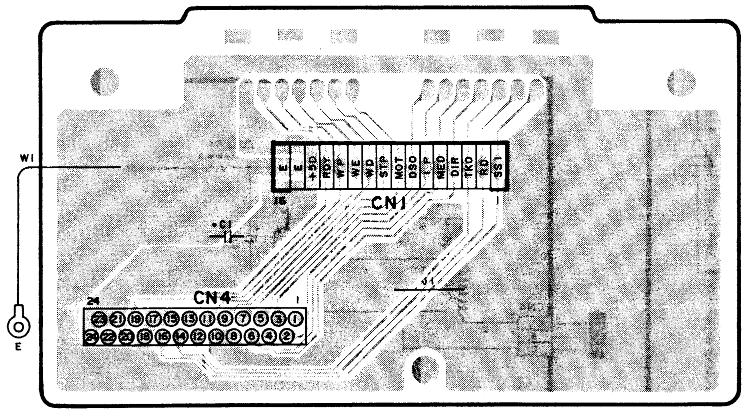
CPSQ **SXPG217511**


CN4
CN3
J1
J2
J3
J4
J5
J6
J7
J8
J9
J10
J11
J12
J13
J14
J15
J16
J17
J18
J19
J20
J21
D100
TUNE & TOUCH
SW1
D101
SOUND
SW2
D103
MEMORY & CONTROL
SW4
D104
MIDI
SW5
D106
MIDI PRESETS
SW7
D107
SEQUENCER
SW8
D1
D2
D4
SEQUENCER
D5
D7
D8
D110
D111
D112
D113
D114
D115
D116
D117
SW11
SW12
SW13
SW14
SW15
SW16
SW17
SW18
D11
D12
D13
D14
D15
D16
D17
D18
D126
D21
D23
D25
D27
9-16
D120
SW21
SEQUENCER REC
D122
SW23
STEP REC
D124
SW25
COMPOSER REC
SW27

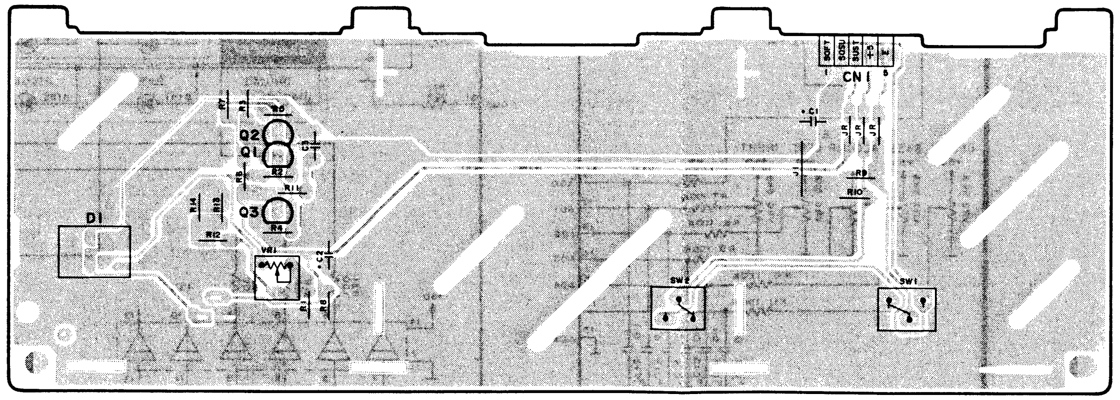
PKB


CN1
SOFT 1
SOSU 2
SUST 3
+5 4
E 5
+5
C1 0.1
SW2
+5
R10 4.7K
SW1
R9 4.7K
+5
C2 0.1
Q3
R4 68K
C3 0.015
R11 0
R6 220K
R5 120K
Q2
Q1
R2 220K
+5
D1
R8 4.7K
R7 120K
R3 33K
VR1 200
R12 390
R1 390
R20 1K
R14 2.2K

FDCN **SXPG217711**


W1
E
+5D
RDY
WP
WD
STP
MOT
DSO
TP
WED
DIR
TK0
RD
SS1
CN1
J6
C1
CN4
24
1
E

PKB **SXPG218211**

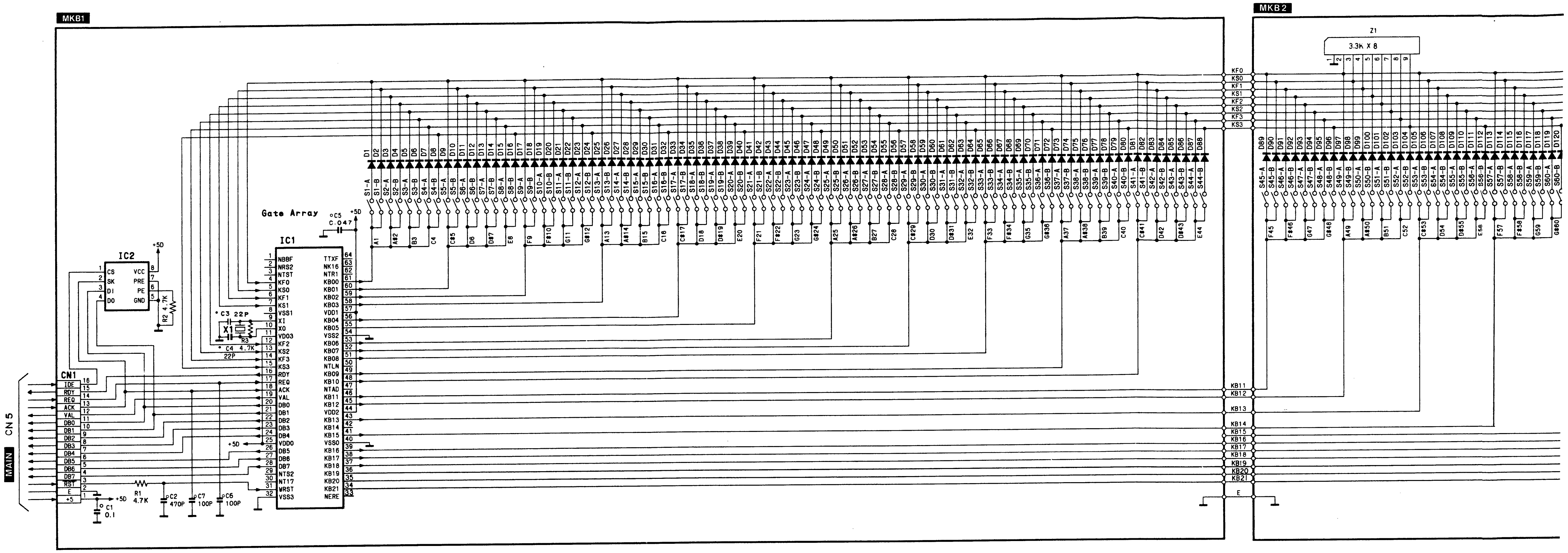

CN1
SOFT
SOSU
SUST
+5
E
C1
Q2
Q1
Q3
R14
R12
VR1
D1
SW2
SW1
R10

PKB

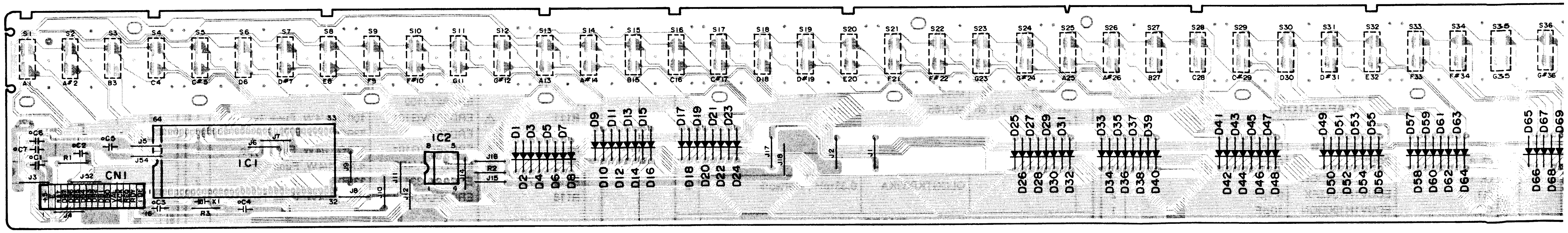
NOTES:

- TRANSISTORS
  - Q1, 2: 2SC1815GR
  - Q3: 2SA1015-GR
- DIODE
  - D1: GP2S24BC

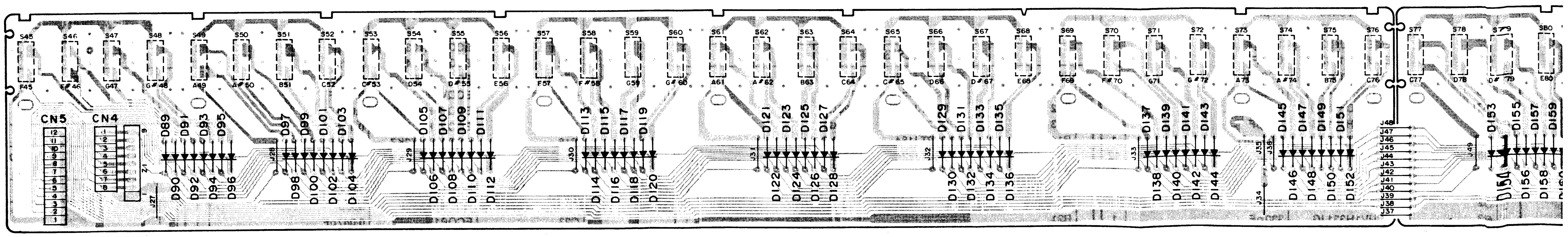
MKB1 MKB2 MANUAL KEYBOARD 1 AND 2 CIRCUIT


MKB1
MKB2
Z1
3.3K X 8
Gate Array
IC1
IC2
CN1
CN 5
MAIN
R1 4.7K
R2 4.7K
R3 4.7K
C1 0.1
C2 470P
C5 0.047
C6 100P
C7 100P
C3 22P
C4 22P
X1

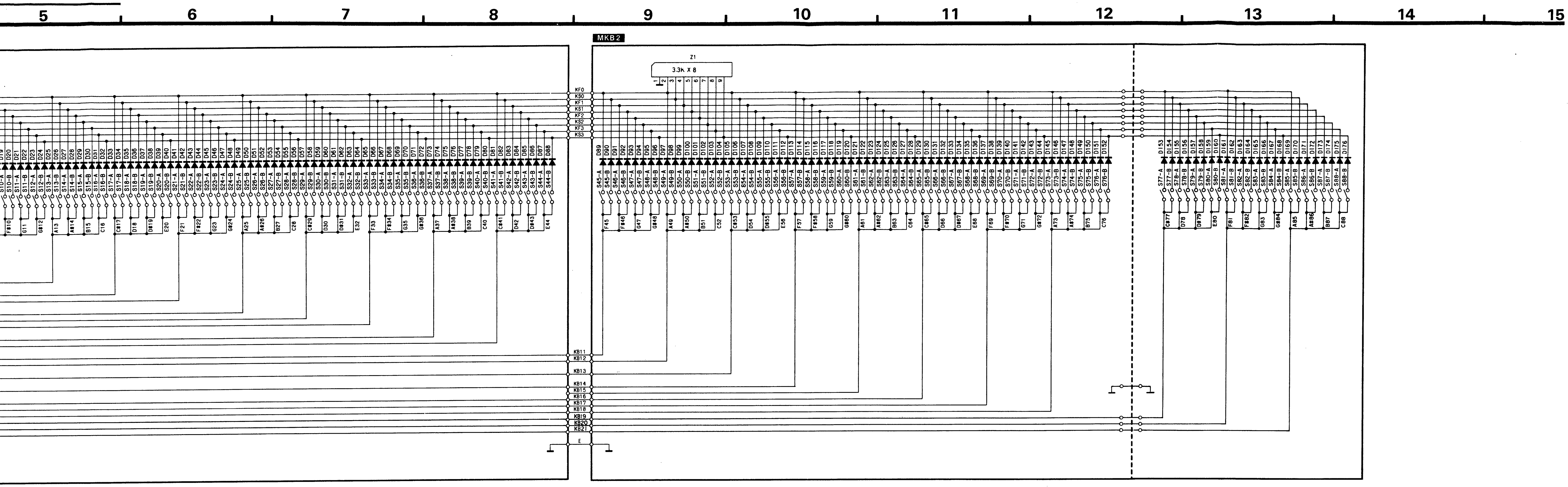
MKB1



MKB2

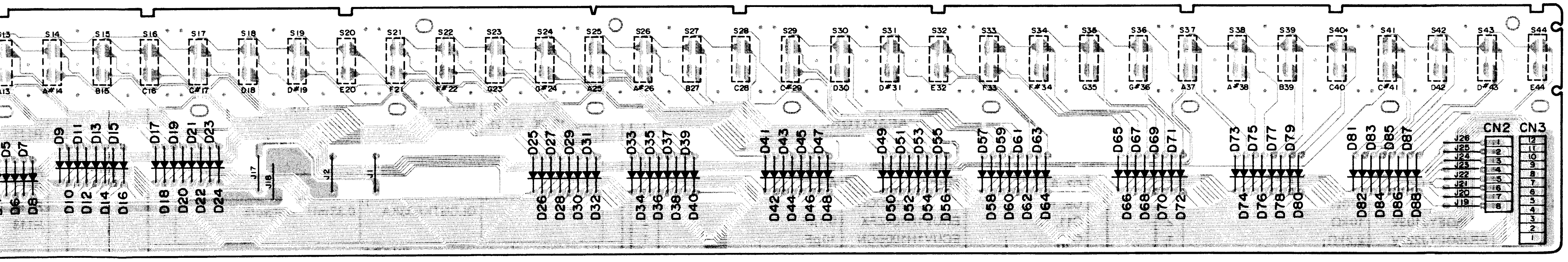


CIRCUIT

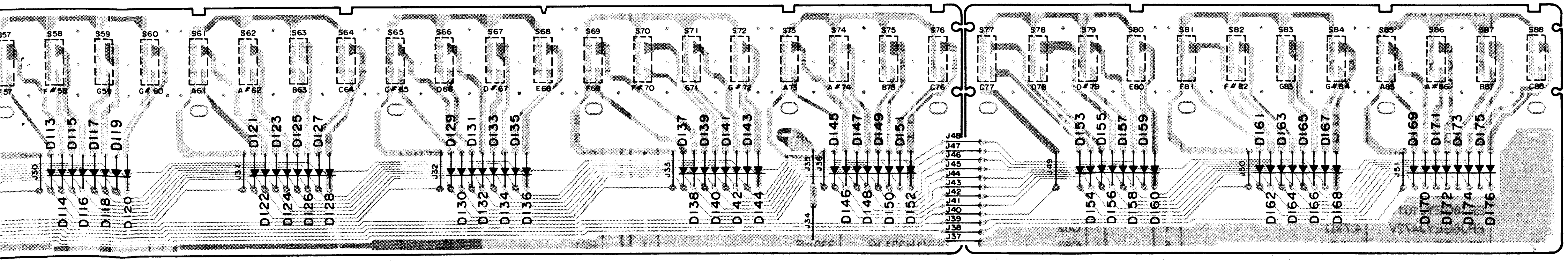


5
6
7
8
9
10
11
12
13
14
15
MKB2
Z1
3.3k X 8
KF0
KS0
KF1
KS1
KF2
KS2
KF3
KS3
KB11
KB12
KB13
KB14
KB15
KB16
KB17
KB18
KB19
KB20
KB21
E

SXPG209741A



SXPG209741B



MKB1

NOTES:

- IC'S

IC1: MSM7U042016
IC2: BR93LC46

- DIODES

D1~88: MA162A

MKB2

NOTES:

- DIODES

D1~88: MA162A

REPLACEMENT PARTS LIST......P.C.B. and Wiring Parts

Notes:

1. The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retension period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.
   After the end of this period, the assembly will no longer be available.
2. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. The "S" mark is service standard parts and may differ from production parts.
4. ○ mark are new parts.
5. For part No. with area mark, check the area when placing an order.

■ PRINTED CIRCUIT BOARD

	RTL	Area	Part No.	Description	P/S
○	RTL		SXPG217311	MAIN	1
○	RTL	Others	SXPG217041	AS	1
○	RTL	M MC XM	SXPG217061	AS	1
	RTL	Others	SXPG216011	ACP	1
	RTL	M MC XM	SXPG216031	ACP	1
	RTL	X XR XS XD XT	SXPG216041	ACP	1
	RTL		SXPG210831	HP	1
	RTL		SXPG142231	MIC	1
○	RTL		SXPG217411A	CPL	1
○	RTL		SXPG217411B	CPR	1
○	RTL		SXPG217511	CPSQ	1
○	RTL		SXPG217711	FDCN	1
○	RTL		SXPG218211	PKB	1
○	RTL		SXPG219611	JACK	1
	RTL		SXPG209741A	MKB1	1
	RTL		SXPG209741B	MKB2	1
○	RTL		EDMMPJ2B6W	LCD	1

MAIN MAIN CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUITS			
○	IC1	D70236AGD10	16 bit Microcomputer	1
	IC2	D65046GD188	Gate Array	1
○	IC3	QSIGCR307AX	4M bit Programmed EP ROM	1
○	IC4	QSIGCR307BX	4M bit Programmed EP ROM	1
○	IC5	QSIG03C08032	8M bit Programmed ROM	1
○	IC7, 10	T518129AFWL8	1M bit Pseudo Static RAM	2
	IC8	SED1330FBA	LCD Controller	1
	IC9	HM65256BLF10	256K bit Pseudo Static RAM	1
	IC11	D72068GF-3B9	Floppy Disk Controller	1
○	IC12	D93083GDLBD	Tone Generator LSI	1
○	IC13	QSIGH3C16CH3	16M bit Programmed ROM	1
○	IC14	QSIGH3C16CH4	16M bit Programmed ROM	1
○	IC15	QSIGH3C16CH5	16M bit Programmed ROM	1
○	IC16	QSIGH3C16CH6	16M bit Programmed ROM	1
○	IC17, 18	TC51832AFL85	256K bit Pseudo Static RAM	2
	IC19, 22	M5218AFP	Operational Amplifier	2
	IC20, 21	PCM1702U	D-A Converter	2
○	IC23	TC7S00F	NAND GATES	1
○	IC24	BA10393F	Comparator	1
	TRANSISTORS			
	Q1, 6, 7, 14	2SB709ARTW	Transistor	4
	Q3	2SB941	Transistor	1
S	Q5, 10	2SC1815GR	Transistor	2
	Q8, 9, 12, 13	2SD601AQTW	Transistor	4
S	Q11	2SA1015-GR	2SA933STRS (SUB. Part)	1

	Ref. No.	Part No.	Description	P/S
	DIODES			
S	D1~4, 6, 14	MA162A	MA150IR (SUB. Part)	6
○	D5	MA1047H	Zener, 4.7V	1
	D8	MA738	Diode	1
	D9	MA2062LF	Zener, 6.2V	1
○	D10	MA1030	Zener, 3.0V	1
○	D15, 16	MA1062M	Zener, 6.2V	2
	OSCILLATORS			
	X1	SVQGA20MX040	20MHz, Ceramic Oscillator	1
○	X2	QSXG2F0800DA	8MHz Ceramic Oscillator	1
	X3	QSXG1I3200A	32MHz, Quartz Oscillator	1
	X4	QSXG1I4915A	49MHz, Quartz Oscillator	1
	COMPONENT COMBINATIONS			
	Z1, 2	EXBS8V101J	100Ω × 4	2
	Z3~6, 17	EXBV8V101J	100Ω × 4	5
	Z7~11, 13, 18~21	EXBV8V221J	220Ω × 4	10
	Z12	EXBV8V102J	1kΩ × 4	1
○	Z14~16	EXBS8V470J	47Ω × 4	3
	Z46	EXBV8V471J	470Ω × 4	1
	COIL			
	L3	QLQGT1T121SA	Coil	1
	RESISTORS			
	R1	ERJ6GEYJ102V	1kΩ	1
	R2	ERJ6GEYJ101V	100Ω	1
	R3, 4	ERJ6GEYJ471V	470Ω	2
	R5	ERJ6GEYJ101V	100Ω	1
	R6, 9~14	ERJ6GEYJ471V	470Ω	7
	R15, 17	ERJ6GEYJ103V	10kΩ	2
	R18	ERJ6GEYJ222V	2.2kΩ	1
	R19	ERJ6GEYJ102V	1kΩ	1
	R20	ERJ6GEYJ334V	330kΩ	1
	R21	ERJ6GEYJ103V	10kΩ	1
	R23	ERJ6GEYJ104V	100kΩ	1
	R24	ERJ6GEYJ102V	1kΩ	1
	R25	ERJ6GEYJ471V	470Ω	1
	R28, 29	ERJ6GEYJ221V	220Ω	2
	R30	ERJ6GEYJ103V	10kΩ	1
	R31	ERJ6GEYJ332V	3.3kΩ	1
	R32	ERJ6GEYJ471V	470Ω	1
	R33	ERJ6GEYJ101V	100Ω	1
	R34, 35	ERJ6GEYJ221V	220Ω	2
	R37	ERJ6GEYJ471V	470Ω	1
	R38	ERJ6GEYJ221V	220Ω	1
	R39	ERJ6GEYJ104V	100kΩ	1
	R40	ERJ6GEYJ101V	100Ω	1
	R42	ERJ6GEYJ472V	4.7kΩ	1
	R44, 46~49	ERJ6GEYJ101V	100Ω	5

	Ref. No.	Part No.	Description	P/S
	R50	ERJ6GEYJ471V	470Ω	1
	R51	ERJ6GEYJ103V	10kΩ	1
	R53	ERJ6GEYJ472V	4.7kΩ	1
	R54	ERJ6GEYJ471V	470Ω	1
	R55	ERJ6GEYJ472V	4.7kΩ	1
	R56	ERJ6GEYJ332V	3.3kΩ	1
	R57	ERJ6GEYJ103V	10kΩ	1
	R60	ERJ6GEYJ104V	100kΩ	1
	R62	ERJ6GEYJ222V	2.2kΩ	1
	R65	ERJ6GEYJ102V	1kΩ	1
	R67, 68	ERJ6GEYJ103V	10kΩ	2
	R70~72	ERJ6GEYJ102V	1kΩ	3
	R73	ERJ6GEYJ223V	22kΩ	1
	R74	ERJ6GEYJ104V	100kΩ	1
	R75~78	ERJ6GEYJ183V	18kΩ	4
	R79, 80	ERJ6GEYJ332V	3.3kΩ	2
	R81	ERJ6GEYJ333V	33kΩ	1
	R82	ERJ6GEYJ682V	6.8kΩ	1
	R83, 84	ERJ6GEYJ473V	47kΩ	2
	R85	ERJ6GEYJ333V	33kΩ	1
	R86	ERJ6GEYJ682V	6.8kΩ	1
	R87, 88	ERJ6GEYJ473V	47kΩ	2
	R89	ERJ6GEYJ102V	1kΩ	1
	R90	ERJ6GEYJ221V	220Ω	1
	R91	ERJ6GEYJ102V	1kΩ	1
	R92, 93	ERJ6GEYJ151V	150Ω	2
	R94	ERJ6GEYJ102V	1kΩ	1
	R95~97	ERJ6GEYJ103V	10kΩ	3
	R98, 99	ERJ6GEYJ221V	220Ω	2
	R100	ERJ6GEYJ102V	1kΩ	1
	R103~105	ERJ6GEYJ471V	470Ω	3
	R106, 107	ERJ6GEYJ224V	220kΩ	2
	R110	ERJ6GEYJ472V	4.7kΩ	1
	R111	ERJ6GEYJ102V	1kΩ	1
	R115	ERJ6GEYJ123V	12kΩ	1
	R116	ERJ6GEYJ103V	10kΩ	1
	R117, 118	ERJ6GEYJ102V	1kΩ	2
	R122	ERJ6GEYJ221V	220Ω	1
	R123	ERJ6GEYJ332V	3.3kΩ	1
	R124~127, 129	ERJ6GEYJ103V	10kΩ	5
	R130, 131	ERJ6GEYJ221V	220Ω	2
	CAPACITORS			
	C1	ECUV1H104ZFX	0.1μF	1
○	C5	ECUV1E473KB	0.047μF	1
	C7, 8	ECUV1H104ZFX	0.1μF	2
	C9, 10	ECUV1H100DCN	10pF	2
	C11, 12	ECUV1H104ZFX	0.1μF	2
	C13	ECUV1H100DCN	10pF	1
	C17~19	ECUV1H104ZFX	0.1μF	3
	C20	EECS5R5V105	1F, 5.5V, Memory Back-up	1
	C21, 23	ECUV1H104ZFX	0.1μF	2
	C24, 25	ECUV1H100DCN	10pF	2
	C27	ECEA1VU470	47μF, 35V	1
	C30	ECUV1H104ZFX	0.1μF	1
	C32	ECEA0JU102	1000μF, 6.3V	1
	C33	ECUV1H104ZFX	0.1μF	1
	C34	ECUV1H102JX	0.001μF	1
	C35	ECUV1H104ZFX	0.1μF	1
	C37	ECEA1CKN100	10μF, 16V	1
	C39	ECUV1H101JG	100pF	1
	C47	ECUV1H102JX	0.001μF	1
	C48~59	ECUV1H104ZFX	0.1μF	12
	C60	ECQB1H103JF	0.01μF	1
	C61	ECUV1H331JG	330pF	1
	C62	ECQB1H103JF	0.01μF	1
	C63	ECUV1H331JG	330pF	1

	Ref. No.	Part No.	Description	P/S
	C64, 65	ECUV1H104ZFX	0.1μF	2
○	C66	ECUV1H221JG	220pF	1
	C67	ECUV1H104ZFX	0.1μF	1
○	C68	ECUV1H221JG	220pF	1
	C69~71	ECUV1H104ZFX	0.1μF	3
	C74, 75	ECUV1H104ZFX	0.1μF	2
	C77~90	ECUV1H104ZFX	0.1μF	14
	C93	ECEA1CKN100	10μF, 16V	1
	C94	ECUV1H104ZFX	0.1μF	1
	C95~97	ECEA1CKN100	10μF, 16V	3
	C99	ECUV1H104ZFX	0.1μF	1
	C101	ECUV1H101JG	100pF	1
	C102~104	ECUV1H104ZFX	0.1μF	3
	C105	ECUV1H100DCN	10pF	1
	C106	ECUV1H104ZFX	0.1μF	1

AS AMP & POWER SUPPLY CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUITS			
○	IC1	M5F78M15L	+15V Voltage Regulator	1
	IC2	M5F79M15L	−15V Voltage Regulator	1
S	IC5~10	SVIGM5218L	Operational Amplifier	6
	TRANSISTORS			
	Q1, 3	2SC3940ARS	Transistor	2
	Q2, 4	2SA1534ARS	Transistor	2
S	Q5, 6, 13, 15, 19, 22	2SA1015-GR	2SA933STRS (SUB. Part)	6
S	Q7, 11, 12, 14, 18	2SC1815GR	Transistor	5
	Q16, 20	2SB946P	Transistor	2
	Q17, 21	2SD1271P	Transistor	2
	DIODES			
	D1, 2 ⚠	SVDGERA1502	Rectifier	2
S	D3~10 ⚠	SVDS3V20	Rectifier	8
	D11, 12	MA4180	Zener, 18V	2
	D15, 19, 20, 27, 28	MA165	Diode	5
	D16, 33	EK04	Diode	2
	COILS			
	L2, 3	QLCGTKR33KA	0.33mH , Network	2
	FUSES			
	F4, 5 ⚠	XBA2C20TB0	T2A, 250V, Others	2
	F4, 5 ⚠	XBA1C25NU100	2.5A, 125V, M MC XM	2
	RESISTORS			
	R9, 10	ERDS2TJ222	2.2kΩ	2
	R11	ERDS2TJ152	1.5kΩ	1
	R12	ERDS2TJ221	220Ω	1
	R13	ERDS2TJ152	1.5kΩ	1
	R14	ERDS2TJ184	180kΩ	1
	R15	ERDS2TJ224	220kΩ	1
	R16	ERDS2TJ184	180kΩ	1
	R18	ERDS2TJ331	330Ω	1
	R19	ERDS2TJ823	82kΩ	1
	R21	ERDS2TJ681	680Ω	1

Ref. No.	Part No.	Description	P/S
	ERJ6GEYJ471V	470Ω	1
	ERJ6GEYJ103V	10kΩ	1
	ERJ6GEYJ472V	4.7kΩ	1
	ERJ6GEYJ471V	470Ω	1
	ERJ6GEYJ472V	4.7kΩ	1
	ERJ6GEYJ332V	3.3kΩ	1
	ERJ6GEYJ103V	10kΩ	1
	ERJ6GEYJ104V	100kΩ	1
	ERJ6GEYJ222V	2.2kΩ	1
	ERJ6GEYJ102V	1kΩ	1
68	ERJ6GEYJ103V	10kΩ	2
~72	ERJ6GEYJ102V	1kΩ	3
	ERJ6GEYJ223V	22kΩ	1
	ERJ6GEYJ104V	100kΩ	1
~78	ERJ6GEYJ183V	18kΩ	4
80	ERJ6GEYJ332V	3.3kΩ	2
	ERJ6GEYJ333V	33kΩ	1
	ERJ6GEYJ682V	6.8kΩ	1
84	ERJ6GEYJ473V	47kΩ	2
	ERJ6GEYJ333V	33kΩ	1
	ERJ6GEYJ682V	6.8kΩ	1
88	ERJ6GEYJ473V	47kΩ	2
	ERJ6GEYJ102V	1kΩ	1
	ERJ6GEYJ221V	220Ω	1
	ERJ6GEYJ102V	1kΩ	1
93	ERJ6GEYJ151V	150Ω	2
	ERJ6GEYJ102V	1kΩ	1
~97	ERJ6GEYJ103V	10kΩ	3
99	ERJ6GEYJ221V	220Ω	2
	ERJ6GEYJ102V	1kΩ	1
~105	ERJ6GEYJ471V	470Ω	3
, 107	ERJ6GEYJ224V	220kΩ	2
	ERJ6GEYJ472V	4.7kΩ	1
	ERJ6GEYJ102V	1kΩ	1
	ERJ6GEYJ123V	12kΩ	1
	ERJ6GEYJ103V	10kΩ	1
, 118	ERJ6GEYJ102V	1kΩ	2
	ERJ6GEYJ221V	220Ω	1
	ERJ6GEYJ332V	3.3kΩ	1
~127, 129	ERJ6GEYJ103V	10kΩ	5
, 131	ERJ6GEYJ221V	220Ω	2
CAPACITORS			
	ECUV1H104ZFX	0.1μF	1
	ECUV1E473KB	0.047μF	1
	ECUV1H104ZFX	0.1μF	2
10	ECUV1H100DCN	10pF	2
12	ECUV1H104ZFX	0.1μF	2
	ECUV1H100DCN	10pF	1
~19	ECUV1H104ZFX	0.1μF	3
	EECS5R5V105	1F, 5.5V, Memory Back-up	1
23	ECUV1H104ZFX	0.1μF	2
25	ECUV1H100DCN	10pF	2
	ECEA1VU470	47μF, 35V	1
	ECUV1H104ZFX	0.1μF	1
	ECEA0JU102	1000μF, 6.3V	1
	ECUV1H104ZFX	0.1μF	1
	ECUV1H102JX	0.001μF	1
	ECUV1H104ZFX	0.1μF	1
	ECEA1CKN100	10μF, 16V	1
	ECUV1H101JG	100pF	1
	ECUV1H102JX	0.001μF	1
~59	ECUV1H104ZFX	0.1μF	12
	ECQB1H103JF	0.01μF	1
	ECUV1H331JG	330pF	1
	ECQB1H103JF	0.01μF	1
	ECUV1H331JG	330pF	1

Ref. No.	Part No.	Description	P/S
C64, 65	ECUV1H104ZFX	0.1μF	2
○ C66	ECUV1H221JG	220pF	1
C67	ECUV1H104ZFX	0.1μF	1
○ C68	ECUV1H221JG	220pF	1
C69~71	ECUV1H104ZFX	0.1μF	3
C74, 75	ECUV1H104ZFX	0.1μF	2
C77~90	ECUV1H104ZFX	0.1μF	14
C93	ECEA1CKN100	10μF, 16V	1
C94	ECUV1H104ZFX	0.1μF	1
C95~97	ECEA1CKN100	10μF, 16V	3
C99	ECUV1H104ZFX	0.1μF	1
C101	ECUV1H101JG	100pF	1
C102~104	ECUV1H104ZFX	0.1μF	3
C105	ECUV1H100DCN	10pF	1
C106	ECUV1H104ZFX	0.1μF	1

AS AMP & POWER SUPPLY CIRCUIT

Ref. No.	Part No.	Description	P/S
INTEGRATED CIRCUITS			
○ IC1	M5F78M15L	+15V Voltage Regulator	1
IC2	M5F79M15L	−15V Voltage Regulator	1
S IC5~10	SVIGM5218L	Operational Amplifier	6
TRANSISTORS			
Q1, 3	2SC3940ARS	Transistor	2
Q2, 4	2SA1534ARS	Transistor	2
S Q5, 6, 13, 15, 19, 22	2SA1015-GR	2SA933STRS (SUB. Part)	6
S Q7, 11, 12, 14, 18	2SC1815GR	Transistor	5
Q16, 20	2SB946P	Transistor	2
Q17, 21	2SD1271P	Transistor	2
DIODES			
D1, 2 ⚠	SVDGERA1502	Rectifier	2
S D3~10 ⚠	SVDS3V20	Rectifier	8
D11, 12	MA4180	Zener, 18V	2
D15, 19, 20, 27, 28	MA165	Diode	5
D16, 33	EK04	Diode	2
COILS			
L2, 3	QLCGTKR33KA	0.33mH , Network	2
FUSES			
F4, 5 ⚠	XBA2C20TB0	T2A, 250V, Others	2
F4, 5 ⚠	XBA1C25NU100	2.5A, 125V, M MC XM	2
RESISTORS			
R9, 10	ERDS2TJ222	2.2kΩ	2
R11	ERDS2TJ152	1.5kΩ	1
R12	ERDS2TJ221	220Ω	1
R13	ERDS2TJ152	1.5kΩ	1
R14	ERDS2TJ184	180kΩ	1
R15	ERDS2TJ224	220kΩ	1
R16	ERDS2TJ184	180kΩ	1
R18	ERDS2TJ331	330Ω	1
R19	ERDS2TJ823	82kΩ	1
R21	ERDS2TJ681	680Ω	1

Ref. No.	Part No.	Description	P/S
R22	ERDS2TJ334	330kΩ	1
R25	ERDS2TJ331	330Ω	1
R26	ERDS2TJ823	82kΩ	1
R27	ERDS2TJ224	220kΩ	1
R28	ERDS2TJ221	220Ω	1
R31	ERDS2TJ681	680Ω	1
R32	ERDS2TJ334	330kΩ	1
R39	ERDS2TJ152	1.5kΩ	1
R41	ERDS2TJ224	220kΩ	1
R42	ERDS2TJ154	150kΩ	1
R43	ERDS2TJ220	22Ω	1
R45	ERDS2TJ224	220kΩ	1
R46	ERDS2TJ220	22Ω	1
R47	ERDS2TJ154	150kΩ	1
R48, 49	ERDS2TJ102	1kΩ	2
R50, 51 ⚠	ERD25FVJ4R7	4.7Ω, 1/4W, Flame-Proof	2
R52, 53	ERDS2TJ103	10kΩ	2
R54, 55 ⚠	ERQ14AJ2R0	2Ω, 1/4W, Fuse Type	2
R56 ⚠	ERD2FCJ6R8	6.8Ω, 1/4W, Fuse Type	1
R57 ⚠	ERD2FCVJ6R8	6.8Ω, 1/4W, Fuse Type	1
R58~60	ERDS2TJ103	10kΩ	3
R61, 62	ERDS2TJ472	4.7kΩ	2
R80	ERDS2TJ472	4.7kΩ	1
R81	ERDS2TJ104	100kΩ	1
R83	ERDS2TJ103	10kΩ	1
R84	ERDS2TJ473	47kΩ	1
R85	ERDS2TJ332	3.3kΩ	1
R86	ERDS2TJ124	120kΩ	1
R89	ERDS2TJ103	10kΩ	1
R90	ERDS2TJ102	1kΩ	1
R91, 92	ERDS2TJ222	2.2kΩ	2
R93	ERDS2TJ103	10kΩ	1
R94, 95	ERDS2TJ102	1kΩ	2
R96, 97 ⚠	ERD2FCVG101	100Ω, 1/4W, Fuse Type	2
R98, 99	ERDS2TJ331	330Ω	2
R100 ⚠	ERD2FCVJ4R7	4.7Ω, 1/4W, Fuse Type	1
R101	ERDS2TJ124	120kΩ	1
R102	ERDS2TJ152	1.5kΩ	1
R104	ERDS2TJ103	10kΩ	1
R105	ERDS2TJ102	1kΩ	1
R106, 107	ERDS2TJ222	2.2kΩ	2
R108	ERDS2TJ103	10kΩ	1
R109, 110	ERDS2TJ102	1kΩ	2
R111 ⚠	ERD2FCVG101	100Ω, 1/4W, Fuse Type	1
R112, 113	ERDS2TJ331	330Ω	2
R114 ⚠	ERD2FCVG101	100Ω, 1/4W, Fuse Type	1
R115 ⚠	ERD2FCVJ4R7	4.7Ω, 1/4W, Fuse Type	1
R116, 117	ERDS2TJ331	330Ω	2
R118 ⚠	ERD2FCVJ6R8	6.8Ω, 1/4W, Fuse Type	1
CAPACITORS			
C5, 6	ECQB1H153JF	0.015μF	2
C7	ECQV1H474JZ	0.47μF	1
C8	ECQV1H334JM	0.33μF	1
C10	ECQB1H153JF	0.015μF	1
C11	ECQB1H103JF	0.01μF	1
C12	ECQV1H474JZ	0.47μF	1
C13	ECQB1H153JF	0.015μF	1
C14	ECQV1H334JM	0.33μF	1
C16	ECQB1H103JF	0.01μF	1
C17	ECQV1H104JM	0.1μF	1
C18	ECQG1H472KZ	0.0047μF	1
C19	ECQG1H682KZ	0.0068μF	1
C20	ECCF1H331J	330pF	1
C21	ECQG1H682KZ	0.0068μF	1
C22	ECCF1H331J	330pF	1
C23	ECQB1H473JF	0.047μF	1

Ref. No.	Part No.	Description	P/S
C24	ECQG1H682KZ	0.0068μF	1
C25, 26	ECCF1H220J	22pF	2
C28 ⚠	ECQE1A104M6	0.1μF, 125V	1
C29, 31	ECEA1VU332	3300μF, 35V	2
C32, 34	ECEA1VU222	2200μF, 35V	2
C36, 37	ECRF1H104ZF	0.1μF	2
C38	ECEA1CKA100	10μF, 16V	1
C39	ECEA1CU331	330μF, 16V	1
C49	ECQV1H224JM	0.22μF	1
C50	ECQB1H223JF	0.022μF	1
C51	ECQV1H104JM	0.1μF	1
C54	ECQV1H224JM	0.22μF	1
C55	ECQB1H223JF	0.022μF	1
C56	ECQV1H104JM	0.1μF	1
C59, 60	ECEA50Y2R2	2.2μF, 50V	2
C61, 62	ECEA50Y8R2	8.2μF、50V	2
C63, 64	ECEA50Y22	22μF, 50V	2

ACP AC POWER SUPPLY CIRCUIT

Ref. No.	Part No.	Description	P/S
LINE FILTER			
L1 ⚠	SLTGLF3	Line Filter	1
JACK			
JK1 ⚠	SJVD0203B	AC Inlet	1
SWITCH			
S1 ⚠	SSRG100A	Voltage Selector, X XR XS XD XT	1
FUSES			
F1 ⚠	XBA1C63NU100	6.3A, 125V, M MC XM	1
F1 ⚠	XBA2C31TB0	T3.15A, 250V, X XR XS XD XT	1
F2 ⚠	XBA2C20TB0	T2A, 250V, X XR XS XD XT	1
F3 ⚠	XBA2C20TB0	T2A, 250V, except M MC XM	1
CAPACITORS			
C1 ⚠	ECKCVA1472MF	4700pF, Line Capacitor	1
C2 ⚠	ECQU2A104MN	0.1μF, 250V, Across-the Line Capacitor	1

HP HEADPHONES CIRCUIT

Ref. No.	Part No.	Description	P/S
COIL			
L1	QLQGT3T150SA	Coil	1
JACKS			
JK1, 2	SJJG100A	Headphone Jack	2
WIRE			
W1	QEXG01008RA	Wire	1

	Ref. No.	Part No.	Description	P/S
	RESISTORS			
	R1~4 ⚠	ERG1ANJP680S	68Ω, 1W, Flame-Proof	4
	CAPACITORS			
	C1, 2	ECKF1E473ZV	0.047µF	2
	C3	ECRF1H104ZF	0.1µF	1

MIC MIC CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUIT			
S	IC1	SVIGM5218L	Operational Amplifier	1
	COILS			
	L1	QLQGT3T150SA	Coil	1
	JACK			
	JK1	SJJG210A	Jack	1
	VARIABLE RESISTORS			
	VR1	EWHD5A576B54	50kΩ B,	1
	WIRES			
	W1	SWEG290A	Wire	1
	W2	QEXG01008RA	Wire	2
	RESISTORS			
	R1	ERDS2TJ224	220kΩ	1
	R2	ERDS2TJ103	10kΩ	1
	R3	ERDS2TJ224	220kΩ	1
	R4	ERDS2TJ103	10kΩ	1
	R5	ERDS2TJ224	220kΩ	1
	R6	ERDS2TJ102	1kΩ	1
	CAPACITORS			
	C1, 2	ECRF1H104ZF	0.1µF	1
	C3	ECEA1HKN010	1µF, 50V	1
	C4, 5	ECCF1H101J	100pF	2
	C6	ECEA1HKN010	1µF, 50V	1
	C7	ECQG1H102KZ	0.001µF	1
	C8	ECRF1H104ZF	0.1µF	1

CPL CONTROL PANEL LEFT CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUITS			
	IC1	M37471M2142S	8bit Microcomputer	1
	IC2, 3	HD74LS07P	Hex Buffers	2
	TRANSISTORS			
S	Q1	2SA1015-GR	2SA933STRS (SUB. Part)	1
	Q2~6	2SA830SB	Transistor	5

	Ref. No.	Part No.	Description	P/S
	DIODES			
	D1~8, 19~43, 47~50, 57, 58	MA165	Diode	39
	D100~106, 110~116, 120~127, 130~132, 136, 141~145, 147, 150~154	SEL4117RM	LED (RED)	37
	D107, 117, 119, 133~135	SEL4417G	LED (Green)	6
	OSCILLATOR			
○	X1	QSXG2F0400DA	4MHz Ceramic Oscillator	1
	SWITCHES			
	S1~8, 19~43, 47~50, 57, 58	EVQ21507K	Push Switch	39
○	S70	QSRGT002AA	Encoder Switch	1
	IC PROTECTOR			
	IP1 ⚠	ICP-N10T104	IC Protector	1
	VARIABLE RESISTORS			
	VR1	QRVG25P01B53	5kΩ B, Main Volume	1
○	VR2~6	QRVG25N01B53	5kΩ B	5
	RESISTORS			
	R1	ERDS2TJ221	220Ω	1
	R2	ERDS2TJ471	470Ω	1
	R3	ERDS2T0	0Ω, 1/4W	1
	R6	ERDS2TJ103	10kΩ	1
	R7~11	ERDS2TJ104	100kΩ	5
	R12~17	ERDS2TJ103	10kΩ	6
	R18~25	ERDS2TJ101	100Ω	8
	R27	ERDS2TJ103	10kΩ	1
	R28	ERDS2TJ221	220Ω	1
	R29	ERDS2TJ471	470Ω	1
	R30	ERDS2TJ103	10kΩ	1
	R31, 32	ERDS2TJ101	100Ω	2
	R40~47	ERDS2TJ103	10kΩ	8
	CAPACITORS			
	C1	ECRF1H104ZF	0.1µF	1
	C4	ECBA1E223ZF	0.022µF	1
	C5, 6	ECCF1H100D	10pF	2
	C7	ECEA0JKA101	100µF, 6.3V	1
	C11~17	ECRF1H104ZF	0.1µF	7

CPR CONTROL PANEL RIGHT CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUITS			
○	IC1	M37471M2196S	16bit Microcomputer	1
○	IC2	HD74LS138P	3 to 8 Decoder	1
	IC3~5	HD74LS07P	Hex Buffers	3
	TRANSISTORS			
	Q1~5	2SA830SB	Transistor	5
S	Q6, 8	2SA1015-GR	2SA933STRS (SUB. Part)	2
	Q7	2SC3940ARS	Transistor	1

	Ref. No.	Part No.	Description	P/S
	DIODES			
	D1~31, 73~84	MA165	Diode	43
	D130~137, 140~147, 150~157, 183, 193, 194	SEL4117RM	LED (RED)	27
	D160~165, 182	SEL4417G	LED (Green)	7
	OSCILLATOR			
○	X1	QSXG2F0400DA	4MHz Ceramic Oscillator	1
	TRANSFORMER			
	T1	QTDG001A	Transformer	1
	SWITCHES			
	S1~31, 73~84	EVQ21507K	Push Switch	43
	IC PROTECTOR			
	IP1 ⚠	ICP-N10T104	IC Protector	1
	RESISTORS			
	R1	ERDS2TJ221	220Ω	1
	R2	ERDS2TJ471	470Ω	1
	R3	ERDS2T0	0Ω 1/4W	1
	R8, 9	ERDS2TJ473	47kΩ	2
	R10, 11	ERDS2TJ472	4.7kΩ	2
	R12~17	ERDS2TJ103	10kΩ	6
	R18~25	ERDS2TJ101	100Ω	8
	R27~35	ERDS2TJ103	10kΩ	9
	R36	ERDS2TJ471	470Ω	1
	R37	ERDS2TJ221	220Ω	1
	R38	ERDS2TJ103	10kΩ	1
	R40~43	ERDS2TJ101	100Ω	4
	R45	ERDS2TJ222	2.2kΩ	1
	R46	ERDS2TJ470	47Ω	1
	R47 ⚠	ERD2FCVJ6R8	6.8Ω, 1/4W, Fuse Type	1
	R50	ERDS2TJ103	10kΩ	1
	CAPACITORS			
	C1	ECRF1H104ZF	0.1µF	1
	C4	ECBA1E223ZF	0.022µF	1
	C5, 6	ECCF1H100D	10pF	2
	C7	ECRF1H104ZF	0.1µF	1
	C8, 9	ECBA1H102KB	0.001µF	2
	C11	ECBA1E223ZF	0.022µF	1
	C16	ECEA1CKN100	10µF, 16V	1
	C17	ECRF1H104ZF	0.1µF	1
	C18	ECEA0JKA470	47µF, 6.3V	1

CPSQ SEQUENCER CONTROL CIRCUIT

	Ref. No.	Part No.	Description	P/S
	DIODES			
	D1, 2, 4, 5, 7, 8, 11~18, 21, 23, 25, 27	MA165	Diode	18
	D100, 101, 103, 104, 106, 107, 110~117, 120, 122, 124, 126	SEL4417G	LED (Green)	18

	Ref. No.	Part No.	Description	P/S
	SWITCHES			
	S1, 2, 4, 5, 7, 8, 11~18, 21, 23, 25, 27	EVQ21507K	Push Switch	18

FDCN FD CONNECTOR CIRCUIT

	Ref. No.	Part No.	Description	P/S
	WIRE			
	W1	QEXG01001RA	Wire	1
	CAPACITOR			
	C1	ECRF1H104ZF	0.1µF	1

PKB PEDAL KEYBOARD CIRCUIT

	Ref. No.	Part No.	Description	P/S
	TRANSISTORS			
S	Q1, 2	2SC1815GR	Transistor	2
S	Q3	2SA1015-GR	2SA933STRS (SUB. Part)	1
	DIODE			
○	D1	GP2S24BC	Photointerrupter	1
	SWITCH			
○	S1, 2	QSTGT001AA	Lever Switch	2
	VARIABLE RESISTORS			
○	VR1	EVND8AA03B22	200Ω B,	1
	RESISTORS			
	R1	ERDS2TJ181	180Ω	1
	R2	ERDS2TJ224	220kΩ	1
	R3	ERDS2TJ333	33kΩ	1
	R4	ERDS2TJ683	68kΩ	1
	R5	ERDS2TJ124	120kΩ	1
	R6	ERDS2TJ224	220kΩ	1
	R7	ERDS2TJ124	120kΩ	1
	R8~10	ERDS2TJ472	4.7kΩ	3
	R11	ERDS2T0	0Ω 1/4W	1
	R12	ERDS2TJ391	390Ω	1
	R14	ERDS2TJ222	2.2kΩ	1
○	R20	ERTD2ZGK102	1kΩ	1
	CAPACITORS			
	C1, 2	ECRF1H104ZF	0.1µF	2
	C3	ECQB1H153JF	0.015µF	1

	Ref. No.	Part No.	Description	P/S
	DIODES			
	D1~31, 73~84	MA165	Diode	43
	D130~137, 140~147, 150~157, 183, 193, 194	SEL4117RM	LED (RED)	27
	D160~165, 182	SEL4417G	LED (Green)	7
	OSCILLATOR			
○	X1	QSXG2F0400DA	4MHz Ceramic Oscillator	1
	TRANSFORMER			
	T1	QTDG001A	Transformer	1
	SWITCHES			
	S1~31, 73~84	EVQ21507K	Push Switch	43
	IC PROTECTOR			
	IP1 ⚠	ICP-N10T104	IC Protector	1
	RESISTORS			
	R1	ERDS2TJ221	220Ω	1
	R2	ERDS2TJ471	470Ω	1
	R3	ERDS2T0	0Ω 1/4W	1
	R8, 9	ERDS2TJ473	47kΩ	2
	R10, 11	ERDS2TJ472	4.7kΩ	2
	R12~17	ERDS2TJ103	10kΩ	6
	R18~25	ERDS2TJ101	100Ω	8
	R27~35	ERDS2TJ103	10kΩ	9
	R36	ERDS2TJ471	470Ω	1
	R37	ERDS2TJ221	220Ω	1
	R38	ERDS2TJ103	10kΩ	1
	R40~43	ERDS2TJ101	100Ω	4
	R45	ERDS2TJ222	2.2kΩ	1
	R46	ERDS2TJ470	47Ω	1
	R47 ⚠	ERD2FCVJ6R8	6.8Ω, 1/4W, Fuse Type	1
	R50	ERDS2TJ103	10kΩ	1
	CAPACITORS			
	C1	ECRF1H104ZF	0.1μF	1
	C4	ECBA1E223ZF	0.022μF	1
	C5, 6	ECCF1H100D	10pF	2
	C7	ECRF1H104ZF	0.1μF	1
	C8, 9	ECBA1H102KB	0.001μF	2
	C11	ECBA1E223ZF	0.022μF	1
	C16	ECEA1CKN100	10μF, 16V	1
	C17	ECRF1H104ZF	0.1μF	1
	C18	ECEA0JKA470	47μF, 6.3V	1

CPSQ SEQUENCER CONTROL CIRCUIT

	Ref. No.	Part No.	Description	P/S
	DIODES			
	D1, 2, 4, 5, 7, 8, 11~18, 21, 23, 25, 27	MA165	Diode	18
	D100, 101, 103, 104, 106, 107, 110~117, 120, 122, 124, 126	SEL4417G	LED (Green)	18

	Ref. No.	Part No.	Description	P/S
	SWITCHES			
	S1, 2, 4, 5, 7, 8, 11~18, 21, 23, 25, 27	EVQ21507K	Push Switch	18

FDCN FD CONNECTOR CIRCUIT

	Ref. No.	Part No.	Description	P/S
	WIRE			
	W1	QEXG01001RA	Wire	1
	CAPACITOR			
	C1	ECRF1H104ZF	0.1μF	1

PKB PEDAL KEYBOARD CIRCUIT

	Ref. No.	Part No.	Description	P/S
	TRANSISTORS			
S	Q1, 2	2SC1815GR	Transistor	2
S	Q3	2SA1015-GR	2SA933STRS (SUB. Part)	1
	DIODE			
○	D1	GP2S24BC	Photointerrupter	1
	SWITCH			
○	S1, 2	QSTGT001AA	Lever Switch	2
	VARIABLE RESISTORS			
○	VR1	EVND8AA03B22	200Ω B,	1
	RESISTORS			
	R1	ERDS2TJ181	180Ω	1
	R2	ERDS2TJ224	220kΩ	1
	R3	ERDS2TJ333	33kΩ	1
	R4	ERDS2TJ683	68kΩ	1
	R5	ERDS2TJ124	120kΩ	1
	R6	ERDS2TJ224	220kΩ	1
	R7	ERDS2TJ124	120kΩ	1
	R8~10	ERDS2TJ472	4.7kΩ	3
	R11	ERDS2T0	0Ω 1/4W	1
	R12	ERDS2TJ391	390Ω	1
	R14	ERDS2TJ222	2.2kΩ	1
○	R20	ERTD2ZGK102	1kΩ	1
	CAPACITORS			
	C1, 2	ECRF1H104ZF	0.1μF	2
	C3	ECQB1H153JF	0.015μF	1

JACK JACK CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUIT			
	IC1	SVIGTLP513	Photo Coupler	1
	TRANSISTORS			
S	Q1~3	2SA1015-GR	2SA933STRS (SUB. Part)	3
	DIODES			
	D1, 3, 4, 6, 7	MA165	Diode	5
	COILS			
	L1~5	QLQGT3T150SA	Coil	5
	JACKS			
○	JK1	QJSG007AA	PEDAL IN	1
	JK2~4	SJSG1370A	MIDI THRU, OUT, IN	3
	JK5~8	QJJG003AA	LINE OUT, AUX IN	4
	WIRES			
	W1~3	QEXG01005RA	Wire	3
	RESISTORS			
	R1, 2	ERDS2TJ102	1kΩ	2
	R4	ERDS2TJ473	47kΩ	1
	R5~7	ERDS2TJ102	1kΩ	3
	R8, 10	ERDS2TJ680	68Ω	2
	R11	ERDS2TJ104	100kΩ	1
	R13	ERDS2TJ151	150Ω	1
	R14	ERDS2TJ330	33Ω	1
	R15	ERDS2TJ104	100kΩ	1
	R16	ERDS2TJ221	220Ω	1
	R17	ERDS2TJ331	330Ω	1
	R18	ERDS2TJ103	10kΩ	1
	R21, 22	ERDS2TJ152	1.5kΩ	2
	R23, 24	ERDS2TJ102	1kΩ	2
	CAPACITORS			
	C1~4	ECRF1H104ZF	0.1μF	4
	C5, 6	ECCF1H221J	220pF	2
	C7	ECKF1E473ZV	0.047μF	1
	C8	ECEA1HKA010	1μF, 50V	1
	C11, 12	ECBA1C222MR	0.0022μF	2
	C13	ECRF1H104ZF	0.1μF	1
	C14, 15	ECBA1C222MR	0.0022μF	2
	C16	ECRF1H104ZF	0.1μF	1

MKB1 MANUAL KEYBOARD 1 CIRCUIT

	Ref. No.	Part No.	Description	P/S
	INTEGRATED CIRCUITS			
	IC1	MSM7U042016	Gate Array	1
	IC2	BR93LC46	1K bit Programmed EEPROM	1
	DIODES			
S	D1~88	MA162A	MA150IR (SUB. Part)	88
	OSCILLATOR			
	X1	SVQGA20MX040	20MHz, Ceramic Oscillator	1
	RESISTORS			
	R1~3	ERDS2TJ472	4.7kΩ	3
	CAPACITORS			
	C1	ECRF1H104ZF	0.1μF	1
	C2	ECCW1H471J5	470pF	1
	C3, 4	ECCW1H220J5	22pF	2
	C5	ECKR1E473ZV	0.047μF	1
	C6, 7	ECCW1H101J5	100pF	2

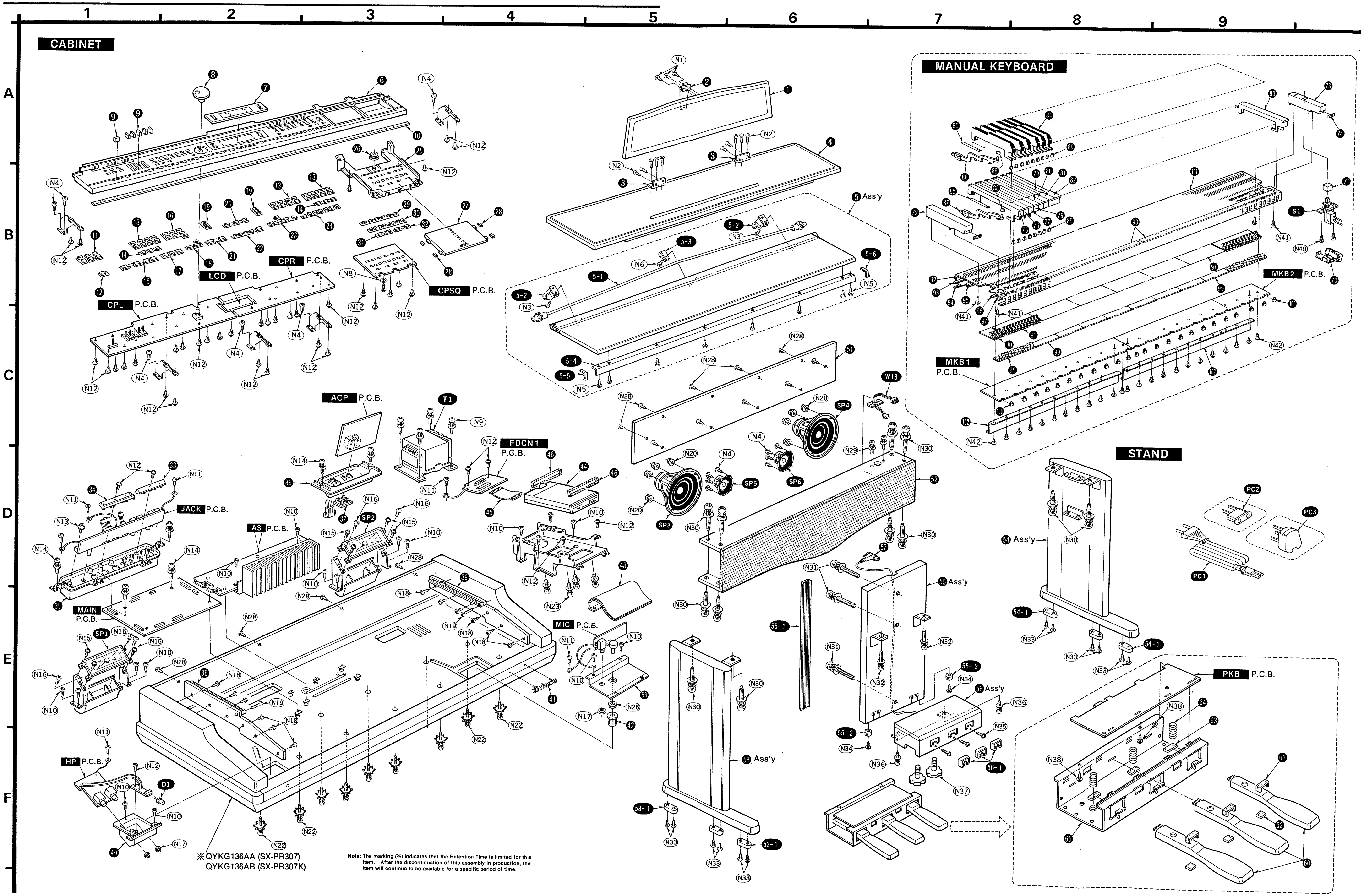
MKB2 MANUAL KEYBOARD 2 CIRCUIT

	Ref. No.	Part No.	Description	P/S
	DIODES			
S	D89~176	MA162A	MA150IR (SUB. Part)	88
	COMPONENT COMBINATION			
	Z1	EXBPI8332JM	3.3kΩ × 8	1

■ WIRING PARTS

	Ref. No.	Part No.	Description	P/S
○	W1	QEXGZA14045A	Connector with Wire	1
○	W2	QEXGZA12055A	Connector with Wire	1
○	W3	QEXGSS08025A	Connector with Wire	1
○	W4	QEXGEH03008A	Connector with Wire	1
○	W5	QEXGSS08015A	Connector with Wire	1
○	W6	QEXGSS11015A	Connector with Wire	1
○	W7	QEXGSS16070A	Connector with Wire	1
	W8	QEXGSS06090A	Connector with Wire	1
○	W9	QEXGZA04095A	Connector with Wire	1
	W10	QEXGSS16110A	Connector with Wire	1
○	W11	QEXGZA06015A	Connector with Wire	1
	W12	QEXGVH04100B	Connector with Wire	1
○	W13	QEXGEL06020B	Connector with Wire	1
	W14	QEXGVH03105B	Connector with Wire	1
○	W15	QEXGEL06065B	Connector with Wire	1

CABINET PARTS LOCATION


1
2
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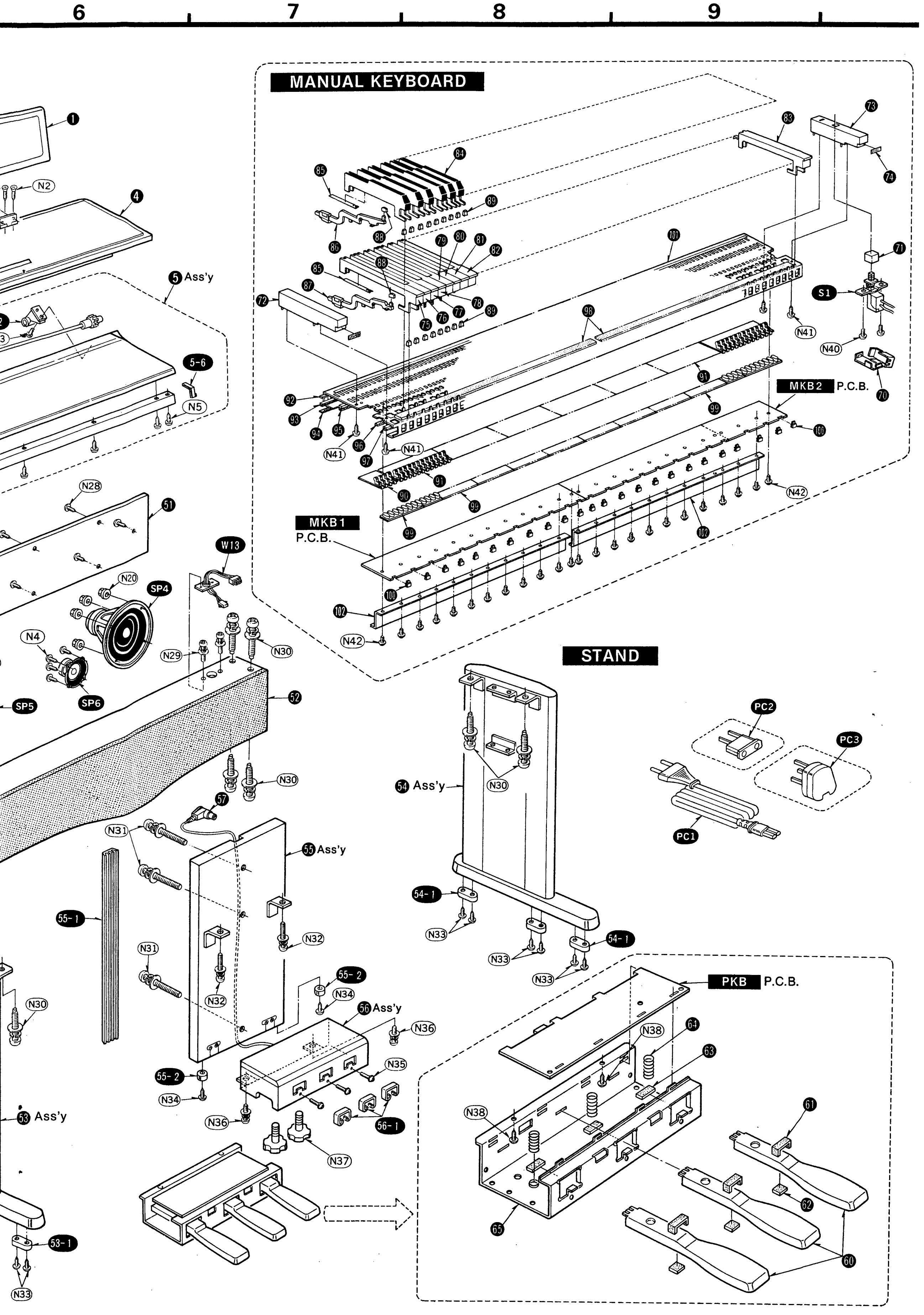
A
B
C
D
E
F
CABINET
MANUAL KEYBOARD
STAND
CPR P.C.B.
LCD P.C.B.
CPL P.C.B.
CPSQ P.C.B.
ACP P.C.B.
FDCN1 P.C.B.
JACK P.C.B.
AS P.C.B.
MAIN P.C.B.
MIC P.C.B.
HP P.C.B.
MKB2 P.C.B.
MKB1 P.C.B.
PKB P.C.B.
5 Ass'y
53 Ass'y
54 Ass'y
55 Ass'y
56 Ass'y
SP1
SP2
SP3
SP4
SP5
SP6
T1
D1
S1
W13
PC1
PC2
PC3
Technics

※QYKG136AA (SX-PR307)
QYKG136AB (SX-PR307K)

Note: The marking (※) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time.



REPLACEMENT PARTS LIST......Cabinet and Chassis Parts

Notes:

1. The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retension period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention.
   After the end of this period, the assembly will no longer be available.
2. ○ mark are new parts.
   Cabinet Colour
   - SX-PX307K .... Black
   - SX-PX307 .... Walnut
3. Important safety notice
   Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
4. For part No. with area mark, check the area when placing an order.
5. The raw material indication for synthtic resin
   In order to facilitate classification of parts of synthetic resin manufacture and to promote the recycling of natural resources, a raw material symbol for such parts is indicated in the Ref. No./Material column.

SX-PR307 CABINET & CHASSIS PARTS

	Ref. No.	Part No.	Description	P/S
	SWITCHES			
	S1 ⚠	ESB823V	Power Switch	1
	DIODES			
	D1	SEL4214RLC05	LED, Power Indicator	1
	SPEAKERS			
	SP1, 2	EAS15S09A	Speaker, 13×6cm 8Ω	2
	SP3, 4	EAS16PL470A3	16cm, 8Ω	2
	SP5, 6	EAS65PH31A3	6.5cm, 8Ω	2
	TRANSFORMER			
	T1	QTPG1N016A	Power Transformer, Others	1
	T1	QTPG1N014A	Power Transformer, M MC XM	1
	T1	QTPG1N017A	Power Transformer, X XR XS XD XT	1
	POWER CORD & PLUG			
	PC1 ⚠	SJAG65	Power Cord, Others	1
	PC1 ⚠	QJAG014AA	Power Cord, XR XL	1
	PC1 ⚠	QJAG013AA	Power Cord, M MC XM	1
	PC1 ⚠	VJA0733	Power Cord, EK XD	1
	PC2 ⚠	SJP5213-1	Attachment Plug, X XT	1
	CABINET PARTS			
○	1	QGAG1024AA	Music Rack	1
	2	SBLG7	Stay	1
	3	SBHG5003	Hinge	2
○	4	QKQGA069AA	Top Cover	1
○	5	QKQGF013AA	Keyboard Cover Ass'y	1
	5-1	QXQG007AA	Axletree	1
○	5-2	QMRG7056AA	Holder	2
	5-3	QWBG002AA	Holder	1
○	5-4	QGKG0095AC	Ornament	1
○	5-5	QMRG7031BB	Protector	1
○	5-6	QMRG7032BB	Protector	1
○	6 PS	QGPG0061AB	Control Panel	1
○	7	QKWG015AA	LCD Panel	1
○	8	QGUG3002BA	Dial Wheel	1
	9	SBNG7050C	Knob	6

SX-PR307K CABINET & CHASSIS PARTS

	Ref. No.	Part No.	Description	P/S
	SWITCH			
	S1 ⚠	ESB823V	Power Switch	1
	DIODE			
	D1	SEL4214RLC05	LED, Power Indicator	1
	SPEAKERS			
	SP1, 2	EAS15S09A	Speaker, 13×6cm 8Ω	2
	SP3, 4	EAS16PL470A3	16cm, 8Ω	2
	SP5, 6	EAS65PH31A3	6.5cm, 8Ω	2
	TRANSFORMER			
	T1	QTPG1N016A	Power Transformer, Others	1
	T1	QTPG1N014A	Power Transformer, M MC XM	1
	T1	QTPG1N017A	Power Transformer, X XR XS XD XT	1
	POWER CORD & PLUG			
	PC1 ⚠	SJAG65	Power Cord, Others	1
	PC1 ⚠	QJAG014AA	Power Cord, XR XL	1
	PC1 ⚠	QJAG013AA	Power Cord, M MC XM	1
	PC1 ⚠	VJA0733	Power Cord, EK XD	1
	PC2 ⚠	SJP5213-1	Attachment Plug, X XT	1
	CABINET PARTS			
○	1	QGAG1024AB	Music Rack	1
	2	SBLG7-2	Stay	1
	3	SBHG5003-2	Hinge	2
○	4	QKQGA069AB	Top Cover	1
○	5	QKQGF013AB	keyboard Cover Ass'y	1
	5-1	QXQG007AA	Axletree	1
○	5-2	QMRG7056AA	Holder	2
	5-3	QWBG002AA	Holder	1
○	5-4	QGKG0095AD	Ornament	1
○	5-5	QMRG7031BA	Protector	1
○	5-6	QMRG7032BA	Protector	1
○	6 PS	QGPG0061AD	Control Panel	1
○	7	QKWG015AA	LCD Panel	1
○	8	QGUG3002BB	Dial Wheel	1
	9	SBNG7050C	Knob	6

SX-PR307 CABINET & CHASSIS PARTS

	Ref. No.		Part No.	Description	P/S
○	10		QMFG1140AA	Felt	1
○	11		QGUG1262AAK	Button	1
○	12		QGUG1272AAK	Button	1
○	13		QGUG1260AAK	Button	3
○	14		QGUG1263AAK	Button	2
○	15		QGUG1264AAK	Button	1
○	16		QGUG1261AAK	Button	1
○	17		QGUG1265AAK	Button	1
○	18		QGUG1273AAK	Button	1
○	19		QGUG1271AAK	Button	2
○	20		QGUG1270AAK	Button	1
○	21		QGUG1266AAK	Button	1
○	22		QGUG1267AAK	Button	1
○	23		QGUG1269AAK	Button	1
○	24		QGUG1268AAK	Button	1
○	25	PS	QGPG0058AB	Subpanel	1
	26		RDG5782ZB	Gear	1
○	27	PS	QGPG0059AA	Subpanel Frame	1
○	28		SHGG9053A	Rubber	4
○	29		QGUG1255AAK	Button	1
○	30		QGUG1256AAK	Button	1
○	31		QGUG1257AAK	Button	1
○	32		QGUG1257ABK	Button	1
	33	PS	QMRG7028AC	Bracket	1
	34	PS	QMRG7029AC	Bracket	1
	35	PS	QGKG0076BB	External Jack Panel	1
	36	PS	QGKG0096AB	AC Jack Panel, Others	1
	36	PS	QGKG0096BA	AC Jack Panel, X XR XS XD	1
	37	⚠ PS	SJS9231A	AC Inlet Cover, Others	1
	37	⚠ PS	SJS9334A	AC Inlet Cover, M MC XM XL XR	1
	38	PS	QKSGG008AA	Keyboard Cover Guide, Left	1
	39	PS	QKSGG009AA	Keyboard Cover Guide, Right	1
	40	PS	QGKG0080AA	Headphone Jack Case	1
	41		SGBG160B	Badge	1
	42		SBNG4010A	Mic Volume Knob	1
	43		SMCG860A	Shield Cover	1
○	44		QAUG006AA	DDR Drive unit	1
○	45		QEUGMQW06D	Flat Cable	1
○	46		QMFG4103AA	Felt	2
			STAND		
○	51		QKUG1030AA	Rear Board	1
○	52		QYKG138AA	Speaker Box	1
○	53		QKQGB250AA	Left Plank Ass'y	1
	53-1		[SHRG2130B	Foot	3
○	54		QKQGB251AA	Right Plank Ass'y	1
	54-1		[SHRG2130B	Foot	3
○	55		QKQGZ084AA	Back Plank Ass'y	1
○	55-1		┌ SGXG2464A	Cord Cover	1
○	55-2		└ QKAG0006AA	Foot	2
○	56		QKQGM045BA	Pedal Box Ass'y	1
○	56-1		[QGKG0113AA	Ornament	3
○	57		QJLG007AA	Pedal Cord	1
○	60		QMWG4002AA	Pedal Arm	3
○	61		QMFG1134AA	Felt	3
○	62		QMFG1135AA	Felt	3
○	63		QMFG1133AA	Felt	3
○	64		QMBG009AA	Spring	3
○	65		QMWG3010AA	Pedal Chassis	1

SX-PR307K CABINET & CHASSIS PARTS

	Ref. No.		Part No.	Description	P/S
○	10		QMFG1140AA	Felt	1
○	11		QGUG1262AAK	Button	1
○	12		QGUG1272AAK	Button	1
○	13		QGUG1260AAK	Button	3
○	14		QGUG1263AAK	Button	2
○	15		QGUG1264AAK	Button	1
○	16		QGUG1261AAK	Button	1
○	17		QGUG1265AAK	Button	1
○	18		QGUG1273AAK	Button	1
○	19		QGUG1271AAK	Button	2
○	20		QGUG1270AAK	Button	1
○	21		QGUG1266AAK	Button	1
○	22		QGUG1267AAK	Button	1
○	23		QGUG1269AAK	Button	1
○	24		QGUG1268AAK	Button	1
○	25	PS	QGPG0058AF	Subpanel	1
	26		RDG5782ZB	Gear	1
○	27	PS	QGPG0059AB	Subpanel Frame	1
○	28		SHGG9053A	Rubber	4
○	29		QGUG1255AAK	Button	1
○	30		QGUG1256AAK	Button	1
○	31		QGUG1257AAK	Button	1
○	32		QGUG1257ABK	Button	1
	33	PS	QMRG7028AC	Bracket	1
	34	PS	QMRG7029AC	Bracket	1
	35	PS	QGKG0076BB	External Jack Panel	1
	36	PS	QGKG0096AB	AC Jack Panel, Others	1
	36	PS	QGKG0096BA	AC Jack Panel, X XR XS XD	1
	37	⚠ PS	SJS9231A	AC Inlet Cover, Others	1
	37	⚠ PS	SJS9334A	AC Inlet Cover, M MC XM XL XR	1
○	38	PS	QKSGG008AB	Keyboard Cover Guide, Left	1
○	39	PS	QKSGG009AB	Keyboard Cover Guide, Right	1
	40	PS	QGKG0080AA	Headphone Jack Case	1
	41		SGBG160B	Badge	1
	42		SBNG4010A	Mic Volume Knob	1
	43		SMCG860A	Shield Cover	1
○	44		QAUG006AA	DDR Drive unit	1
○	45		QEUGMQW06D	Flat Cable	1
○	46		QMFG4103AA	Felt	2
			STAND		
○	51		QKUG1030AB	Rear Board	1
○	52		QYKG138AB	Speaker Box	1
○	53		QKQGB250AB	Left Plank Ass'y	1
	53-1		[SHRG2130B	Foot	3
○	54		QKQGB251AB	Right Plank Ass'y	1
	54-1		[SHRG2130B	Foot	3
○	55		QKQGZ084AB	Back Plank Ass'y	1
○	55-1		┌ SGXG2464B	Cord Cover	1
○	55-2		└ QKAG0006AA	Foot	2
○	56		QKQGM045BB	Pedal Box Ass'y	1
○	56-1		[QGKG0113AA	Ornament	3
○	57		QJLG007AA	Pedal Cord	1
○	60		QMWG4002AA	Pedal Arm	3
○	61		QMFG1134AA	Felt	3
○	62		QMFG1135AA	Felt	3
○	63		QMFG1133AA	Felt	3
○	64		QMBG009AA	Spring	3
○	65		QMWG3010AA	Pedal Chassis	1

SX-PR307 CABINET & CHASSIS PARTS

Ref. No.	Part No.	Description	P/S
MANUAL KEYBOARD			
70 PP	SHRG8390A	Cover, Power SW.	1
71	QGUG1040AA	Button, Power Switch	1
72 PS	QGPG0042AB	End Cover Panel, Left	1
73 PS	QGPG0041BD	End Cover Panel, Right	1
74	QMFG1104AA	Felt	2
75 AS	QMWG1001AA	White Key (First Octave A Key)	1
76 AS	QMWG1002AA	White Key (B Key)	8
77 AS	QMWG1003AA	White Key (C Key)	7
78 AS	QMWG1004AA	White Key (D Key)	7
79 AS	QMWG1005AA	White Key (E Key)	7
80 AS	QMWG1006AA	White Key (F Key)	7
81 AS	QMWG1007AA	White Key (G Key)	7
82 AS	QMWG1008AA	White Key (A Key)	7
83 AS	QMWG1009AA	White Key (Top Octave C Key)	1
84 AS	QMWG2001AA	Black Key	36
85	SUSG534A	Spring	88
86	QMWG8019CA	Hammer (Black Key)	36
87	QMWG8017CA	Hammer (White Key)	52
88	SHGG9121A	Rubber Cap (Hammer)	88
89 PA	QMWG8024AA	Key Guide	88
90 ABS	QMWG8022AA	Fulcurum (4 pcs. on one)	1
91 ABS	QMWG8021AA	Fulcurum (12 pcs. on one)	7
92	SHRGA9080A	Sponge	2
93	QMFG1073AA	Felt	2
94	SHSG3461A	Felt	1
95	QMFG1101AA	Felt	2
96	QMFG1061AA	Felt	2
97	QMFG1060AA	Felt	2
98	QMFG1086AA	Felt	2
99	QMWG6006AA	Rubber Switch (8 pcs. on one)	11
100	SHRG9751A	P.C.B. Holder	24
101	QMWG3003BA	Chassis	1
102	SUWG3157A	Angle	2

SX-PR307K CABINET & CHASSIS PARTS

Ref. No.	Part No.	Description	P/S
MANUAL KEYBOARD			
70 PP	SHRG8390A	Cover, Power SW.	1
71	QGUG1040AA	Button, Power Switch	1
72 PS	QGPG0042AB	End Cover Panel, Left	1
73 PS	QGPG0041BD	End Cover Panel, Right	1
74	QMFG1104AA	Felt	2
75 AS	QMWG1001AA	White Key (First Octave A Key)	1
76 AS	QMWG1002AA	White Key (B Key)	8
77 AS	QMWG1003AA	White Key (C Key)	7
78 AS	QMWG1004AA	White Key (D Key)	7
79 AS	QMWG1005AA	White Key (E Key)	7
80 AS	QMWG1006AA	White Key (F Key)	7
81 AS	QMWG1007AA	White Key (G Key)	7
82 AS	QMWG1008AA	White Key (A Key)	7
83 AS	QMWG1009AA	White Key (Top Octave C Key)	1
84 AS	QMWG2001AA	Black Key	36
85	SUSG534A	Spring	88
86	QMWG8019CA	Hammer (Black Key)	36
87	QMWG8017CA	Hammer (White Key)	52
88	SHGG9121A	Rubber Cap (Hammer)	88
89 PA	QMWG8024AA	Key Guide	88
90 ABS	QMWG8022AA	Fulcurum (4 pcs. on one)	1
91 ABS	QMWG8021AA	Fulcurum (12 pcs. on one)	7
92	SHRGA9080A	Sponge	2
93	QMFG1073AA	Felt	2
94	SHSG3461A	Felt	1
95	QMFG1101AA	Felt	2
96	QMFG1061AA	Felt	2
97	QMFG1060AA	Felt	2
98	QMFG1086AA	Felt	2
99	QMWG6006AA	Rubber Switch (8 pcs. on one)	11
100	SHRG9751A	P.C.B. Holder	24
101	QMWG3003BA	Chassis	1
102	SUWG3157A	Angle	2

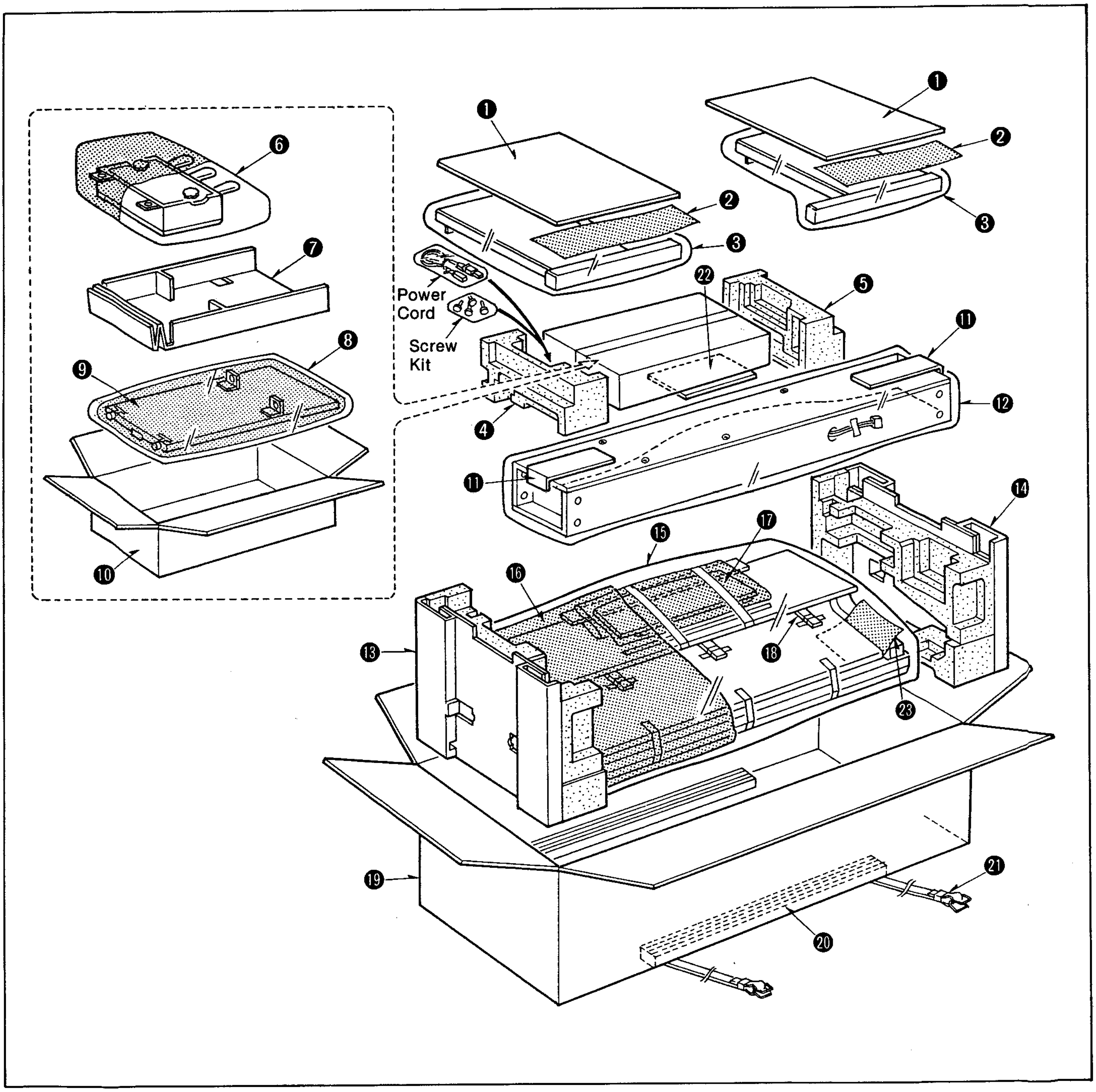
SX-PR307 CABINET & CHASSIS PARTS

	Ref. No.	Part No.	Description	P/S
	SCREWS & WASHERS			
	N1	XTB3+10AFVC	Screw	3
	N2	XTS3+10AFVC	Screw	10
	N3	XTB4+10B	Screw	2
	N4	XTT4+12A	Screw	14
	N5	XTT4+10A	Screw	8
	N6	XTT4+12AFZ	Screw	1
	N8	QHWG004AA	Washer	1
	N9	XYN4+F16	Screw with Washer	4
	N10	XTB35+12A	Screw	18
	N11	SNEG2660A	Screw	4
	N12	XTW3+10Q	Screw	60
	N13	XTWSG2	Screw with Washer	1
	N14	XYN4+F25	Screw with Washer	6
	N15	XTW3+8J	Screw	8
○	N16	XTB4+10C	Screw	4
	N17	XNS12FZ	Nut	3
	N18	XTB35+16A	Screw	12
	N19	XTN4+50AFZ	Screw	2
	N20	SNE499-1	Nut	8
	N22	QHDG021AA	Screw with Washer	10
	N23	XYN3+F8	Screw with Washer	4
	N26	SNE4021-1	Nut	1
	N28	XTT4+25AFVC	Screw	14
	N29	QHDG004AA	Screw	2
	N30	QHDG016AA	Screw with Washer	12
	N31	XYN6+F40FZ	Screw with Washer	3
	N32	XYN4+F20FVC	Screw with Washer	2
	N33	XTW3+16JFZ	Screw	12
	N34	XTB35+25A	Screw	2
	N35	XYN4+F16FZ	Screw with Washer	3
	N36	XYN4+F10FZ	Screw with Washer	2
○	N37	QKAG0008AA	Adjuster	2
	N38	XTT4+16A	Screw	2
	N40	XTV3+10C	Screw	2
	N41	XTB4+12A	Screw	4
	N42	XTW3+10T	Screw	24

SX-PR307K CABINET & CHASSIS PARTS

	Ref. No.	Part No.	Description	P/S
	SCREWS & WASHERS			
	N1	XTB3+10AFZ	Screw	3
	N2	XTS3+10AFZ	Screw	10
	N3	XTB4+10B	Screw	2
	N4	XTT4+12A	Screw	14
	N5	XTT4+10A	Screw	8
	N6	XTT4+12AFZ	Screw	1
	N8	QHWG004AA	Washer	1
	N9	XYN4+F16	Screw with Washer	4
	N10	XTB35+12A	Screw	18
	N11	SNEG2660A	Screw	4
	N12	XTW3+10Q	Screw	60
	N13	XTWSG2	Screw with Washer	1
	N14	XYN4+F25	Screw with Washer	6
	N15	XTW3+8J	Screw	8
○	N16	XTB4+10C	Screw	4
	N17	XNS12FZ	Nut	3
	N18	XTB35+16A	Screw	12
	N19	XTN4+50AFZ	Screw	2
	N20	SNE499-1	Nut	8
	N22	QHDG021AA	Screw with Washer	10
	N23	XYN3+F8	Screw with Washer	4
	N26	SNE4021-1	Nut	1
	N28	XTT4+25AFZ	Screw	14
	N29	QHDG004AA	Screw	2
	N30	QHDG016AB	Screw with Washer	12
	N31	XYN6+F40FZ	Screw with Washer	3
	N32	XYN4+F20FZ	Screw with Washer	2
	N33	XTW3+16JFZ	Screw	12
	N34	XTB35+25A	Screw	2
	N35	XYN4+F16FZ	Screw with Washer	3
	N36	XYN4+F10FZ	Screw with Washer	2
○	N37	QKAG0008AA	Adjuster	2
	N38	XTT4+16A	Screw	2
	N40	XTV3+10C	Screw	2
	N41	XTB4+12A	Screw	4
	N42	XTW3+10T	Screw	24

PACKING



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Power Cord
Screw Kit

■ PACKING PARTS

Ref. No.			Part No.	Description	P/S
	1		QPGG0199AA	Cardboard	2
	2	PE	SPHG1730A	Protection Sheet	2
	3	PE	SPHG2050A	Polyethylene Bag	2
○	4	PS	QPNG0322BA	Pad, Upper R	1
○	5	PS	QPNG0323BA	Pad, Upper L	1
	6	PE	SPHG1740A	Protection Sheet	1
○	7		QPNG0411AA	Cardboard	1
	8	PE	SPHG2050A	Polyethylene Bag	1
	9	PE	SPHG1580A	Protection Sheet	1
○	10		QPNG0410AA	Carton	1
○	11		QPNG0447AA	Spacer	2
	12	PE	QPFG012AA	Polyethylene Bag	1
○	13	PS	QPNG0327BA	Pad	1
○	14	PS	QPNG0328BA	Pad	1
	15	PE	SPHG2200A	Polyethylene Bag	1
	16	PE	QPHG028AA	Protection Sheet	1
	17	PE	SPHG2240A	Protection Sheet	1
	18		SPNG5161A	Spacer	3
○	19		QPGG0260AA	Carton, SX-PR307	1
○	19		QPGG0261AA	Carton, SX-PR307K	1
	20		QPGG0218AA	Pad	2
	21		SPSG40A	Band	2
	23		QPHG018AA	Protection Sheet	2

Ref. No.		Part No.	Description	P/S
OPERATING INSTRUCTION MANUAL				
○	22	QQFGPR307AA	Operaring instruction manual, Others	1
○	22-1	QQTG0226A	ENGLISH	1
○	22	QQFGPR307BA	Operaring instruction manual, M	1
○	22-1	QQTG0229A	ENGLISH	1
○	22	QQFGPR307CA	Operaring instruction manual, MC	1
○	22-1	QQTG0226A	ENGLISH	1
○	22-2	QQTG0230A	FRANCAIS	1
○	22	QQFGPR307DA	Operating instruction manual, EZ EA	1
○	22-1	QQTG0231A	DEUTSCH	1
○	22	QQFGPR307EA	Operating instruction manual, EW	1
○	22-1	QQTG0230A	FRANCAIS	1
○	22-2	QQTG0231A	DEUTSCH	1
○	22-3	QQTG0232A	ITALIANO	1
○	22	QQFGPR307GA	Operating instruction manual, EF	1
○	22-1	QQTG0230A	FRANCAIS	1
○	22-2	QQTG0232A	ITALIANO	1
○	22	QQFGPR307HA	Operating instruction manual, EH	1
○	22-1	QQTG0233A	NERDERLANDS	1
○	22-2	QQTG0230A	FRANCAIS	1
○	22-3	QQTG0231A	DEUTSCH	1
○	22	QQFGPR307JA	Operating instruction manual, EP XM	1
○	22-1	QQTG0226A	ENGLISH	1
○	22-2	QQTG0234A	ESPANOL	1
○	22	QQFGPR307KA	Operating instruction manual, X	1
○	22-1	QQTG0226A	ENGLISH	1
○	22-2	QQTG0234A	ESPANOL	1
○	22-3	QQTG0235A	中文	1
○	22	QQFGPR307LA	Operating instruction manual, XT	1
○	22-1	QQTG0235A	中文	1